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THE
W O N D E R S
O F
N A T U R E A N D A R T;
B E I N G A N
A C C O U N T
O F

Whatever is most Curious and Remarkable
throughout the W O R L D ;

Whether relating to its

ANIMALS, VEGETABLES, MINERALS, VOLCA-
NOES, CATARACTS, HOT and COLD SPRINGS,

A N D

Other Parts of NATURAL HISTORY ;

O R, T O T H E

BUILDINGS, MANUFACTURES, INVENTIONS,
and DISCOVERIES of its Inhabitants.

The Whole collected from the Writings of the best
HISTORIANS, TRAVELLERS, GEOGRAPHERS, and
PHILOSOPHERS, among which are some *Original*
Manuscripts; interspersed with pious OBSERVATI-
ONS and REFLECTIONS; illustrated with NOTES,
and adorned with COPPER-PLATES.

The S E C O N D E D I T I O N.

V O L. V.

L O N D O N:

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THE
W O N D E R S
O F
N A T U R E A N D A R T.

C H A P. II.

O F B A R B A R Y.

UNDER the general name of Barbary we comprehend the kingdoms of Morocco, Fez, Algiers, Tunis, Tripoli, and Barca, which begin at the Atlantic Ocean, and stretch from thence along the coast of the Mediterranean as far as Egypt. This vast tract of land is, next to Egypt, the most fruitful, trading, and populous part of Africa, and is generally supposed to have had it's name from the Romans, on account of the ferocity and barbarity of it's inhabitants. With respect to it's fertility, it must be observed, that Barca is scarce any thing else but a parched barren desert, with very little water; there being only some small spots near villages that afford a little corn and a few dates, a small quantity of which the natives exchange with their neighbours for sheep and camels. The

soil of Tunis is generally fruitful towards the west, but very poor towards the east for want of water; and that part of Tripoli contiguous to Tunis is tolerably fertile. Algiers is very mountainous towards the Mediterranean; but both the hills and vallies, where they are cultivated, abound in corn, dates, almonds, olives, figs, grapes, and other fruits. The country of Fez and Morocco is finely diversified with mountains and vast extended plains, most of them sufficiently fruitful, and pretty well inhabited; though in many parts, as well as the rest of Barbary, it is dry, sandy, and barren.

Most of this large country, now called Barbary, was famous in the times of the ancient Romans, against whom the Carthaginians maintained three bloody wars, the second of which had almost put an end to the Roman power and glory, as the third did to that of Carthage, which they took and burnt to the ground. Nor did the Romans rest contented with having destroyed that rival city, and brought the Carthaginians under their yoke; but they extended their conquests on all sides, reduced Numidia and it's king Jugurtha, whose ancestors had so long reigned there; and after him the brave Juba, king of Mauritania. Thus not only all the coast of Africa on the Mediterranean, but the inland part as far as the desert, became subject to the Roman yoke, and made new provinces of their vast empire. In this condition it continued, during the reigns of several emperors, till, Christianity having taken root in the country, it became as eminent for men of learning and piety, as it is at present for a race of cruel plunderers and pirates, enemies to the Christian name.—But we must not enter into the history of Barbary, that being foreign to our design, which is to survey it's natural and artificial rarities.

SPRINGS,

SPRINGS, CAVES, &c.

THOUGH Barbary in general is but indifferently furnished with springs of water, there are some which are remarkable for their qualities. Near the town of Elhamma, on the frontiers of Tunis, there is a hot spring, the water whereof is conveyed to the town by an aqueduct, but is so warm and impregnated with sulphur, that it can scarce be drank till it has been exposed to the air for four and twenty hours. These hot baths, which have little hovels built over them to shelter them from the weather, are resorted to from all parts of the kingdom. One of them is called the leper's bath, and below it the water stagnates and forms a pool, which perhaps may be the lake of lepers, mentioned by Leo. The water of these springs is perfectly clear, and soft to the palate.

NEAR the city of Constantina, in the kingdom of Algiers, there is a very hot spring, and at a little distance another that is surprisngly cold, with a stone structure embellished with statues and other ornaments. The people thereabouts, who are very ignorant, have a notion that this place was a college, the masters and scholars of which being very wicked were turned into these statues. Nor is this the only superstitious opinion that prevails among them, especially the women; for there are great numbers of snails bred among these springs, which their marabbuts, a sort of conjuring priests very much regarded, have persuaded them are malicious devils that do them all the hurt they can, giving them violent fevers and other diseases; and the credulity of those poor people the marabbuts fail not to turn to their own advantage.

IN the same province of Constantina Dr. Shaw takes notice of other hot springs, called hammam mefkouten, the silent or enchanted baths, situated on a low ground surrounded with mountains. The water of these fountains is of an intense heat, and at a small distance there are others which upon comparison are of as intense a coldness; perhaps therefore these may be the same with those mentioned in the preceding paragraph. We may judge of the heat of these sulphureous springs by what the doctor tells us, that they will boil a large piece of mutton very tender in a quarter of an hour; and by what he farther observes, that the rocky ground the water runs over, to the distance sometimes of a hundred feet, is dissolved or rather calcined by it. When the substance of the rock is soft and uniform, then the water, by making every way equal impressions, forms it into the shape of cones or hemispheres, about six feet high, and nearly of the same diameter; which the Arabs * maintain to be so many tents of their predecessors turned into stone: but when these rocks, besides their soft chalky substance, contain some layers of harder matter, not so easily dissolved, then, in proportion to the resistance the water has met with, we are entertained with a confusion of traces and channels, distinguished by the Arabs into sheep, camels, and horses; nay, into men, women, and children, whom they suppose to have undergone the like fate with their habitations.

THE sound occasioned by the trampling of horses over the ground about these fountains makes

* It is to be observed, that Barbary is inhabited by three sorts of people, Moors, Turks, and Arabs, these last living in tents, and their chief riches consisting in their cattle. The Moors are distinguished into whites and blacks.

it probable that it is hollow underneath; and our author supposes, that the subterraneous air escaping continually through the springs may cause that mixture of shrill, murmuring, and deep sounds, which, according to the direction of the wind and the motion of the external air, issue out along with the water. The Arabs affirm these sounds to be the music of the fairies, who are supposed in a particular manner to make their abode at this place, and to be the grand agents in all these extraordinary appearances.

THE doctor mentions another curiosity proceeding from the quality of the water of these springs, which is, that the chalky stone being dissolved into a fine impalpable powder, and carried down afterwards with the stream, lodges itself upon the sides of the channel, nay sometimes upon the lips of the fountains themselves, or embracing twigs, straws, and other bodies in its way, immediately hardens and shoots into a bright fibrous substance, forming itself at the same time into a variety of glittering figures and beautiful crystallizations.

BESIDES those already enumerated, there are several other mineral springs in the kingdom of Algiers and other parts of Barbary, either moderately warm and proper to bathe in, or too hot for that intention. There are also divers springs and rivers, whose names doctor Shaw has given us, which are either very salt or brackish; and yet the Arabs, by long use and custom, are very well reconciled to the taste of the water. To these we may add the salt-pits of Arzew, which, are about six miles in compass, and appear like a large lake in winter, but are dry in summer, the water being then exhaled and the salts left behind crystallized.

IN the province of Ducala, in the kingdom of Morocco, there is a town called Maitbir, upon a mountain of the same name, noted for it's hundred wells, or rather caverns, cut down into the solid rock, which were probably designed for magazines to lay up corn in, where they pretend it will keep a hundred years*. The common people, however, have a notion that they conceal some treasure, and accordingly they let themselves down by ropes, with lights in their hands, in order to find it out; but we do not learn that they have made any discovery of that nature. These wells, as they are called, consist of several stories one under another,

* It is certain that wheat may be preserved even longer than a hundred years by proper management. In order to this it must at first be shifted from place to place with a shovel every fifteen days, for at least six months successively, and afterwards once a month, or not quite so often, for some time longer. When the dust and other impurities are dispersed by this proceeding, and the corn has exhaled all it's fiery particles, it may be kept as long as you please, provided the roof of the granary be of a reasonable height, and all humidity excluded. But to prevent the bad impressions of the air, and keep out vermin, the most effectual method is to spread a little unslaked lime over the heap, and sprinkle it with water, whereby a sort of crust is formed upon the surface of the corn, of two or three inches thickness.—The memoirs of the royal academy of sciences inform us, that in the year 1707 a magazine of corn was opened in the citadel of Mentz, which had been stored up in 1578, and the bread made of it was very good. At the castle of Sedan in Champagne the Abbé de Louvois was shewn a heap of corn that had been preserved there a hundred and ten years, notwithstanding the moisture of the place at first made it sprout up to the height of eighteen inches. These shoots, dying and rotting for want of air, sunk down upon the corn they sprung from; and this glutinous compost, incorporating with the grain underneath it, formed a very thick crust, which dried and hardened, and preserved the rest of the heap. Some bread made of this corn was sent to the French court, and gave great satisfaction.

the

the lowest whereof is very large, and leads to several cells, in which are springs of fresh water. As there are many windings and turnings in these caverns, it is said those who descend into them are often lost, especially if their lights happen to go out. This we are told was the case of a certain adventurer, who had the good fortune however to stumble upon some animal that lived in these subterraneous apartments, which led him out through a natural passage in the rock, that opened into a thick wood at the foot of the mountain. Upon the discovery of this new opening, people flocked thither with their pick-axes, in order to dig in search of the supposed treasure, but instead of that met with some fresh springs, which filled the whole place with water.

F O S S I L S.

UNDER this article we shall find little remarkable in Barbary, though the country is not destitute of mines of copper, iron, and other metals. Near Algiers and Bona, says Dr. Shaw, a soft flaky stone lies immediately upon the surface of the earth, which is frequently gilded over with gold-like spangles; as the sparry matter, that fills up the fissures, glitters with those that imitate silver. The common flint stone, our author observes, which most countries have in plenty, occurs so seldom in some parts of Barbary, that our merchant vessels have received some of them in the Downs for ballast, and disposed of them at Algiers for seven shillings the quintal.

BESIDES the common mould or soil of Algiers, there are two or three kinds of pipe and potter's clay, the former of which generally burns red. Fuller's earth is also dug in great abundance; to

which we may add the steatites or soap-earth, which is in great esteem in the bagnios for cleansing and softening the skin. Lac lunæ, which the Arabs sometimes use in staunching blood, lies usually in the futures of some laminous rocks in one part of the country, and a hard species of almagra or Spanish bole occurs frequently in another.

THE selenites sometimes spreads itself over whole acres of the woody and mountainous districts, and a transparent, yellow, and flesh-coloured talc, or gypsum, often expands itself in thin cakes over some rocky parts of the country. In pounding the gypsum we often meet with a number of small gold-like nodules, of a regular mathematical figure; but the gold and silver-like marcasites or pyrites are irregular with regard to their shape, being sometimes formed like the mesentery, kidney, or such sort of figures as they usually assume in other places.

THE iron of the kingdom of Algiers is white and good, but is not found in any great quantity. Some of the mountains have a rich ponderous ore, with a mixture of cinnabar, but no mines have been opened there, as Dr. Shaw was informed. They have rich lead ores, from which large quantities of that metal might be obtained, if their mines were under a better regulation. Their method of refining it is to put layers of wood and ore alternately upon each other; and setting the pile on fire, they frequently obtain eighty pounds of metal from one quintal of ore.

THE regencies of Algiers and Tunis look with an envious eye upon the silver and copper mines of the Tingitanians, though our author supposes, that their mountains, by farther searches and experiments, might probably be found to contain the
same

same materials, especially copper; for in the mountain of Fernan there are large strata of ponderous stones, tinged all over with green efflorescences; and Dr. Shaw had a specimen from that place which seemed to shoot into grains of tin in no small quantity. The mountain Tmolga likewise abounds with stones of the same quality, being in all appearance very strongly impregnated with copper.

VEGETABLES.

THE cicer, or chich pea, is very much cultivated and esteemed in Barbary. This sort of pulse is called garvanços, and is most valued when parched, being a favourite food to persons of all ages and distinctions. For this purpose there are copper-pans and ovens in almost every street of the eastern cities; and the method of parching these pease seems to be of great antiquity. When parched they are called leblebby, and some writers have taken them for the pigeon's dung mentioned in scripture at the siege of Samaria. It is certain, says Dr. Shaw, that this pulse is pointed at one end, and acquires an ash-colour in parching; and as the first circumstance answers to the usual figure, the other to the usual colour of pigeon's dung, the supposition is not intirely groundless.

THEY have a small parsnip in Barbary, somewhat like a turnip, with fibrous roots, which has a taste so agreeably pungent, that it is very much esteemed, and sold by weight. Besides our common garden herbs, they have calabashes, and several other productions of the vegetable kind, which give a relish to their soups and ragouts; nor should their coriander be omitted, which has always a principal share in the Moorish cookery.

Colliflowers arrive to great perfection in Barbary infomuch that Dr. Shaw tells us he has seen feveral that were very white, folid, and compact, meafuring a yard or more in circumference. Their mufk-melons are little fuperior to ours in the richnefs of their tafte, but their water-melons exceed any that are raifed in the northern climates. This laft fort (which they call dillah) feems to be providentially calculated for the fouthern countries, as it affords a cool refreshing juice, quenches thirft, mitigates feverifh diforders, and thereby compenfates, in a great degree, for the exceffive heats to which thefe countries are fubject.

WE have already given an account of the palm or date tree, of which there are great numbers in Barbary; but we may add one particular relating to it, for which we are indebted to the learned traveller fo often quoted. It is ufual (he fays) with perfons of better fafhion in this country to entertain their guefts at a wedding, the birth of a child, or upon any extraordinary occafion, with the honey (as they call it) of the date-tree. This they procure by cutting off the head of one of the more vigorous kinds, and fcooping the top of the trunk into the fhape of a bafon. When the fap afcends, it lodges in this cavity, at the rate of three quarts or a gallon a day, during the firft week or fortnight; after which the quantity daily diminifhes, and in fix weeks or two months the juice is intirely confumed, the tree becomes dry, and is fit for nothing but fire-wood or timber. This liquor, which has a more lufcious fweetnefs than honey, is of the confiftence of a thin fyrup, but foon grows tart and ropy, acquiring an intoxicating quality, and yielding by diftillation an agreeable fpirit.

THERE

THERE is a shrub very common in the deserts of Barbary, which has the leaves, prickles, flower, and fruit of the jujeb, only with this difference, that the fruit is round, smaller, and more luscious, and the branches are not so jointed or crooked. This fruit is in great repute, and sold in the markets all over the southern districts of the kingdoms of Algiers and Tunis.

In those kingdoms they have a species of apricot, usually of the size and shape of a nectarine, and with the same property of not parting from the stone. The eating of these is never attended with a surfeit, whereas the common apricot is very dangerous, occasions a variety of fevers and dysenteries, and is called by a name that signifies the killer of the Christians. They have two or three species of plums and cherries, but none of them either in plenty or delicious. The cherry has been formerly in such esteem, that it continues to be called the berry of the king. Their nectarines are larger than ours, and of a better taste; and their peaches, besides their excellent flavour, will commonly weigh ten ounces. Some of their pomegranates are three or four inches in diameter, and of a pound weight. Nor ought we to omit the prickly pear, called the fig of the Christians, perhaps (as Dr. Shaw supposes) from it's being originally brought from Europe. Many families live upon it during the months of August and September; though it is never known to tinge the urine of a bloody colour, as it is said to do in America. The walnut and olive-tree are propagated all over Barbary, but the hazel, filbert, gooseberry and currant-tree, are scarce to be met with in the country. In the years 1723 and 1724, the locusts made vast destruction among the vineyards of Algiers, before which time (says our author) their

wine was not inferior to the best Hermitage, either in briskness or flavour; and, though it is much degenerated since, it may still dispute the preference with the wine of Spain or Portugal. The lemon and Seville orange-tree, especially the former, are in a continued succession of fruit and blossoms; but the China orange is not a native of the country, and only bears towards the latter end of autumn.

WE shall conclude this article with an observation of Dr. Shaw's relating to the gardens or Barbary, namely, that they are not laid out with any method, beauty, or design, the whole being nothing but a medley and confusion of trees, with beds of cabbages, turnips, beans, &c. and sometimes wheat and barley dispersed among them. Fine walks, parterres, flower-plats, &c. would be to these Africans the loss of so much profitable soil; as planting in order and regularity, the study of soil and composts, or the aiming at any improvements and discoveries, would be deviating from the practice of their ancestors, whose footsteps they follow with the utmost reverence and devotion.

A N I M A L S.

OF all the animals of Barbary, the lion, usually called the king of beasts, seems to merit our first attention. This fierce animal, which rules with a tyrannical empire over the inhabitants of the woods and deserts, has a head very large, and not at all proportioned to his body. He has a thick flattish nose, a very wide mouth, red fiery eyes, hollow, and looking somewhat awry. His neck is adorned with a fine shagged mane, but the lioness wants this ornament. He has a long tail,
very

The Lion



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very strong legs, and each of his fore feet has five distinct claws, the hinder but four, all crooked, sharp, and exceeding hard. The hair of some lions is curled, of others lank and thin, and always of a dunnish colour; for those who pretend there are black, white, and red lions, are grossly mistaken, none such being to be found, except those which owe their birth to heraldry or painting. The roaring of the lion is frightful, and every beast dreads his approach. He is of a very savage nature, preying upon other animals, chiefly the wild boar, which yet (as Dr. Shaw informs us) hath sometimes been known to defend itself with so much bravery, that the victory has inclined to neither side, the carcasses of them both having been found lying dead together, all in gore and mangled to pieces.

SOME have reported that the lion is afraid of women, and that, upon taking up a stick and calling him names, he will immediately lose his fierceness, and fly from the flocks they are attending. Something of this kind (says our learned traveller) perhaps may have happened when they have been well satiated with food, at which time the Arabs pretend the lions have so little courage, that they can seize upon their prey, and rescue it out of their jaws. But these instances are very rare, it oftener falling out, that lions devour women as well as men, for want of other creatures. Fire is what they are most afraid of; and yet, notwithstanding all the precaution the Arabs take in this respect, together with the barking of their dogs, and the noise themselves make all night long, it frequently happens, that a lion will leap into the midst of an inclosure, and bring out along with him a sheep or a goat. If these ravages are repeated, the Arabs take notice where the lion enters,

ters, and there dig a pit, covering it over slightly with reeds, or small branches of trees, into which he falls and is taken.

THE hunting of the lion, according to Dr. Shaw, is in some respects like the method of taking elephants heretofore described. On this occasion a whole district is summoned to appear, who, forming themselves into a circle, inclose a space of three, four, or five miles in compass, according to the number of people and quality of the ground that is pitched upon to be the scene of action. The footmen advance first, rushing into the thickets with their dogs and spears to put up the game; whilst the horsemen, keeping a little behind, are always ready to charge, as soon as the wild beast makes a fall. Thus they proceed, still contracting their circle, till they all at last either close in together, or meet with something to divert them. This sort of pastime is sometimes very agreeable; for different kinds of animals being by this means driven together, they seldom fail of having chaces after hares, jackals, hyenas, and other creatures, as well as the lion. But this sport is frequently attended with fatal accidents; for it is a common observation, that when the lion perceives himself in danger, nay sometimes the very moment he is roused, he will seize directly upon the person that is nearest to him, and, rather than quit his hold, suffer himself to be cut to pieces.

WE have already taken some notice of the jackal, which creature, as well as the siyah ghush, or black-eared cat, is supposed to be the lion's provider; but our author thinks it may be doubted whether there be any such friendly intercourse between such different animals. In the night-time indeed, as the psalmist observes, when all the
beasts

beasts of the forest do move, these, like other kinds of beasts, are prowling after sustenance; and when the sun rises, and the lion betakes himself to his den, both the *siyah ghush* and the jackal have been seen gnawing such carcases as the lion is supposed to have fed upon the night before. This, and the promiscuous noise which the jackal is often heard to make with the lion, are the only circumstances Dr. Shaw is acquainted with in favour of the vulgar opinion. — The jackal yelps every night about the gardens and villages, feeding upon roots, fruit, and carrion. Mr. Ray supposes it to be the *lupus aureus* of the ancients; but what Oppian describes as such is a creature of much more ferocity.

NEXT to the lion, among the quadrupeds of a less tameable nature, we ought to mention the panther, whose skin is of a yellow colour, beautifully marked with round black spots, his hair short and mossy, and who is thought to equal, if not exceed the lion in its savage qualities*. This creature is very swift, and attacks both men and beasts; but his usual method of seizing his prey is jumping upon it by surprise. His tongue is rough as a file, and his skin is in great request for

* Notwithstanding the natural ferocity of the lion, some authors give us instances of its generous and grateful temper. Father Maimbourg, in his history of the *Croisades*, tells us of a gentleman that had delivered a lion from a monstrous serpent, which had twisted itself round the body of that animal, and would have stung him to death if the gentleman had not killed it with his spear. The lion, sensible of the kindness done him, accompanied his benefactor like a dog during his stay in the Holy Land; and when he embarked for Europe, the master of the ship refusing to take the lion on board, he swam after the ship till his strength being exhausted he was drowned. But our readers will not expect we should vouch for the truth of stories of this nature.

it's beauty, and bears a large price, being not very common. The female panther, like the lioness, has two rows of nipples, giving suck to three, sometimes four or five whelps at a time. The Arabs say, that when the young ones breed their teeth they are seized with a fever, which generally carries off three out of four; and that this is the reason why their numbers at present are so inconsiderable. But whether this is owing to such a disease, to a greater dispersion of the Arabs, or to the easier way of killing them since the invention of fire-arms, it is certain (says our judicious author) there would be great difficulty at present to procure a fiftieth part of the number of wild beasts that Africa may be supposed to have furnished in the time of the ancient Romans.

AFTER the lion and panther, the dubbah or hyena is the fiercest of the wild beasts of Barbary; but of this animal we have formerly given a description *. We may add however, from Dr. Shaw, that the creature naturally limps upon his hinder right leg, notwithstanding which imperfection he is tolerably swift, and cannot be so easily run down as the wild boar. His neck is remarkably stiff, so that in looking behind, or snatching obliquely at any object, he is obliged to move his whole body, in the same manner as the hog, the badger, and crocodile. His colour is dun, inclining to be reddish, with some streaks of a dark brown; and the hair upon his neck is near a span long. When any of these creatures are taken, the Arabs take great care to bury the head, lest the brain, according to their superstition, should be made use of in sorcery and enchantment.

* See the account we have given of the animals in Turkey in Asia.

THERE is an animal in Barbary called faadh, which agrees with the leopard in being spotted, but differs in other respects; for the skin is not only of a deeper colour, but much coarser; neither is the creature itself of so fierce a nature: however, the Arabs imagine it to be a spurious offspring between a lion and a leopards. It feeds upon carrion, sometimes upon roots and herbs, and must be in great necessity if it attacks a sheep or goat. It can therefore hardly be taken for the *lupus cervarius* of the ancients, which is described to be a much fiercer creature.

THERE are two other animals of this country marked like a leopard, but their spots are of a darker colour, and the fur somewhat longer and softer. The one is of the cat-kind, about a third less than a full-grown leopard, and Dr. Shaw thinks it may be taken for a species of the lynx, or rather for the lesser panther of Oppian. The other has a small pointed head, with such teeth, feet, &c. as shew it to be of the weasel kind. It has a round slender body, about a foot long; and it's tail is regularly marked with a succession of black and white ringlets.

THE horse, (says our author) formerly the glory and distinguishing badge of Numidia, hath of late years very much degenerated in Barbary; or rather the Arabs have been discouraged from breeding up a fine race, which they were sure would one time or other fall into the hands of the Turkish officers. A valuable and well taught Barbary horse (besides the supposed quality of never lying down, and of standing still when the rider drops his bridle) is to have a long pace, and to stop short, if required, in a full career. No other motions are practised or admired in that country, it being reckoned very impolite among the

the Arabs to trot or amble. But how much soever the Barbs may have formerly been esteemed, at present the doctor tells us the Egyptian horses have deservedly the preference of all others for size and beauty, the smallest of them being usually sixteen hands high, and all of them shaped, according to their phrase, like the antelope.

AMONGST other observations relating to the kingdoms of Algiers and Tunis, our author mentions this remarkable particular, viz. that a gelding or a weather is rarely if ever known in those countries; for such males of sheep, or of the black cattle, as are more than sufficient for the preservation of the species, have only their testicles squeezed or discomposed when they are about three months old; the Mahometans accounting it an act of cruelty to castrate any creatures except those of their own species.

LET us now take a view of some of the most curious birds of Barbary, as they are described by the learned traveller we have so often mentioned, to whom the public is much indebted for his accurate observations on several parts of that country. A remarkable animal of the feathered tribe is the houbaara, which is as big as a capon, and its body of a longer shape. It frequents the confines of the deserts, and feeds upon little shrubs and insects. The body is of a light dun or yellowish colour, interspersed all over with little brown marks; but the larger feathers of the wing are black, having each of them a white spot near the middle. Those of the neck are whitish with black streaks, but are chiefly remarkable for their length, and for being erected when it is attacked or provoked. Its bill is about an inch and a half long, flat, like that of the starling; and its legs agree in shape, and in the want of the hinder toe, with those

The Hottentot



The Boobank



those of the bustard. Nothing can be more entertaining (adds the doctor) than to see this bird pursued by the hawk, and what various stratagems it makes use of in order to escape it's enemy.

THERE is a bird called by the Arabs the boo-onk or long-neck, because in walking and searching for food it throws out it's neck seven or eight inches. It is of the bittern kind, somewhat less than the lapwing, having short and slender legs, of a green colour. It's bill is likewise green, three inches long, and in shape resembling that of a stork. The neck, breast, and belly are of a light yellow, but the back and upper part of the wings are of a jet black. The tail is short, and the feathers of the neck are long and sometimes streaked with white.

THE emseesy, or ox-bird, which is about the size of a curlew, is very beautiful, being all over of a milk-white colour, except the bill and legs, which are of a fine red. It generally feeds in the meadows, along with cattle, but it's flesh is not savoury, and soon corrupts.

THEY have a species of thrush in Barbary which is justly admired for the richness of it's plumage. The head, neck, and back are of a fine light green, the wings of a lark-colour, the breast white and spotted like the thrush's, the rump of an elegant yellow, and the ends of the feathers of the wings and tail are tipped with the same colour. This bird is not very common, appearing only in the summer-months, when figs are in season.

THE Capsa sparrow, so called from a city of that name in Tunis, is a curiosity that deserves our notice as much as any other of this kind. It is about as big as the common house-sparrow, and is frequent in the date-villages to the westward of the lake of Marks. The colour of it is like that
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of a lark, except on the breast, which is somewhat lighter, and shines like a pigeon's. But what this bird is admired for is it's sweet melodious note, infinitely preferable, says Dr. Shaw, to that of the Canary bird or nightingale. On this account several attempts have been made to bring it to Kai-roan and other parts of the country; but it has been always found of so delicate a nature, as to languish and pine away upon being removed from it's native climate.

THE rhaad or fafsaf is a gregarious bird, of which there are two species in Barbary, the smaller whereof is as big as an ordinary pullet, but the larger is about the size of the houbaara, differing also from the lesser in having a black head, with a tuft of dark blue feathers immediately below it. Each species of them has a white belly, the back and the wings of a buff-colour spotted with brown, the tail lighter, but marked all along with transverse streaks of black. The word rhaad denotes thunder in the language of the country, and is supposed to be a name given to this bird from the noise it makes, like our partridges, in springing from the ground; as fafsaf, the other name, expresses the beating of the air when the bird is got upon the wing.

ANOTHER bird of the gregarious kind is called the kitawiah, which, like the rhaad, wants the hinder toe, and frequents the most barren parts of Barbary, as the rhaad does the more fertile parts of the country. In size and shape it resembles a dove, and, like some birds of that kind, has short feathered feet. It's body is of a livid colour, with black spots; the belly is blackish, and upon the throat there is the figure of a half-moon in a beautiful yellow. Each feather of the tail has a
white

white spot at the extremity, and the middle one is longer than the rest, and pointed. The flesh is of the same colour with that of the rhaad, and is not of an agreeable flavour, but of easy digestion.

AMONG the more curious birds of Barbary, we may add to the eagle kind, says our author, the karaburno, an ash-coloured hawk, about the bigness of our buzzard, with a black bill, yellow short feet, the back of a bluish colour, the pinions of the wings black, with a whitish tail and belly.

THEY have a kind of water hen in Barbary, with a white spotted wing and dark green feet. It is less than a plover, has a black bill, an inch and a half long, the belly and breast of a dark brown colour, and the back still darker. The rump is white below, and variegated above with black and white streaks.

ANOTHER bird or two may suffice for a specimen of the fowls of Barbary, amongst which our author takes notice of a sort of shoveler, of the bigness of a wigeon. It has red feet, a broad flat bill, black, and armed with teeth; its breast, belly, and head are of an iron-colour, and upon each wing there are three spots of blue, white, and green, contiguous to each other.

THERE is another kind of shoveler somewhat larger than the former, but with a lesser bill, a reddish neck, and a head adorned with a small tuft of tawny feathers. It has a white belly, but the back is diversified with streaks of black and white alternately. The feathers of the tail are pointed, and those of the wings have each of them a black and white spot contiguous to each other. The extremity of the bill is black, and the feet are bluer than those of the wigeon.

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As to animals of the lizard and serpent kind, most of those we have described in Egypt are common in several parts of Barbary, particularly the thaibanne, a large serpent, of whose skin Dr. Shaw says he has seen purses made, which were four inches or more in diameter.

THE zurreike is another serpent common in the deserts, which is usually about fifteen inches long, of a slender body, and remarkable, as the name seems to imply, for darting itself along with great swiftness; which makes Dr. Shaw's conjecture, of it's being the jaculus of the antients, not improbable.

BUT the most malignant of this class of animals is the leffah, which is of a less uniform turn of body than the serpent last described, and seldom above twelve inches in length. The torrida dipfas of Lucan answers very well both to the name (which signifies to burn) and the venomous quality of this serpent.

THE taitah is another species of serpent, between which and the leffah the Arabs say there is the same antipathy as naturalists have long ago assigned between the chameleon and the viper; and that a drop of clammy juice let fall by the taitah upon the leffah will throw the latter into such convulsions as are attended with almost immediate death.

FEW species of insects, and creatures under that denomination, occurred to Dr. Shaw in those parts of Africa he travelled in, but such as have been already described by naturalists. The most curious species of the butterfly kind is near four inches from the extremity of one wing to that of the other, being all over beautifully streaked with murrey and yellow. The edges of the lower wings indeed are to be excepted, which are indented, and
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terminate in a narrow strip an inch long, bordered with yellow in an elegant manner. What adds to the beauty is a spot of a carnation colour near the tail.

THE rarest kind of the adder-bolt is one with a broad tail, of a rusty colour, three or four inches in length, and the wings bright and spotted: but there is another (says the doctor) of the same size, with a body more cylindrical, and differing little in form from the common locust.

A BEETLE with one horn, of the colour and size of a chesnut, is a species to be met with, but the least frequent of any. It's head is notched round, or indented, and it's feet broad, like those of the gryllo-talpa or mole-cricket. The lesser nasicornes are every where met with, and a variety of elastic beetles.

AMONGST the species of locusts to be found in Barbary, our author mentions one of three inches in length, of a brown colour, with the fore legs armed with strong horny claws. Another sort, of the same size, and of the cucullated kind, has it's upper wings streaked with a light green, and the membranaceous ones chequered with flesh-colour, brown, and scarlet. There is a third species about two inches long, with beautiful green wings, whose chief characteristics are two antennæ, which project from the forehead like a couple of feathers.

WE have already given an account of locusts in general*; but to what we have said on that subject it may not be amiss to subjoin what Dr. Shaw has related concerning those devouring in-

* See our description of the animals of Persia.

sects. Those which the doctor saw in Barbary, in 1724 and 1725, were much larger than our common grasshoppers, having brown spotted wings, with legs and bodies of a bright yellow. The wind having been some time southerly, they first appeared towards the end of March; and in the middle of April their numbers were so much increased, that in the heat of the day they formed themselves into large bodies, appearing like a succession of clouds, and darkening the sun. About the middle of May they began to retire into proper parts of the country to deposit their eggs, and in the month following the young brood began gradually to make it's appearance. It was surprising to observe (says our author) that as soon as they were hatched, they immediately collected themselves together, forming compact bodies of several hundred yards square, which marching forwards over trees, walls, and houses, eat up every plant in their way, and let nothing escape them. To stop the progress of these destructive animals, the inhabitants of the country made trenches all over their fields and gardens, and filled them with water; or else endeavoured to destroy them by placing in a row great quantities of heath, stubble, or such combustible materials, and setting them on fire on their approach. All this was to no purpose; the trenches were quickly filled up, and the fires put out by infinite swarms succeeding one another; whilst the front seemed regardless of danger, and the rear pressed on so close that a retreat was impossible. After one of these bodies had been in motion for a day or two (says our author) others were hatched to glean after them, which they did in a very effectual manner, gnawing off the young branches and even the bark of
such

such trees as had escaped before, with the loss only of their fruit and foliage.

IN this manner, adds the doctor, they lived near a month upon the ruin of every thing that was green or juicy, till they arrived at their full growth, and, by casting their skins, threw off their worm-like state. To prepare themselves for this metamorphosis, they hang by their hinder feet to a twig, branch, the corner of a stone, or the like; when by an undulating motion, used on that occasion, their heads first appear, and their bodies soon after. The whole transformation, says our author, is performed in seven or eight minutes, after which they lie in a languishing condition for a little time; but when their wings are hardened by the air and sun, and the moisture dried up which was left upon casting their sloughs, they returned again to their former voracity, with an addition both of strength and agility. However, they did not continue long in this state before they were intirely dispersed, as their parents were before, after laying their eggs to prepare for a fresh offspring.

THESE insects, says the doctor, sprinkled with salt and fried, are in taste not much unlike our cray-fish. The Jews were allowed to eat them*; and Ludolphus has a dissertation wherein he endeavours to prove that the quails the Israelites fed upon in the wilderness were only a species of locusts: but the psalmist, in calling them feathered fowls, seems intirely to contradict that supposition. However, to engage in controversies of this kind is foreign to our purpose.

* Levit. xi. 22.

THE scorpion, continues our author, in consideration of it's noxious qualities, may claim the next place after the locust. Some of the species are long and narrow, others rounder and larger; but each of them have a tail consisting of six joints, not seven, as some ancient writers have asserted. Those on this side of mount Atlas are not very hurtful, the sting being only attended with a slight fever, and the application of a little Venice treacle soon asswaging the pain. But the scorpions of Zaab, and most other parts of the desert, as they are larger and of a darker complexion, so their poison is more malignant, and frequently proves mortal.—The bite of the boolakaz or rhax is of the same venomous nature; and it is computed that twenty or thirty persons die every year by the hurt received from this animal and the leffah.

THE method of curing the bite of these creatures is either to burn the part, or to make a deep incision, and cut away the contiguous flesh. Sometimes the patient is buried up to the head in the hot sands, or in pits heated for that purpose. When no great danger is apprehended, they only apply hot ashes, or the powder of alhenna, with two or three thin slices of an onion, tying them as a cataplasm upon the part affected. Our author never heard that olive-oil was made use of, which has lately been found a specific remedy against the bite of the viper, being rubbed warm upon the wound *.

HAVING

* Of this we have several instances recorded in the Philosophical Transactions, particularly those of William Oliver and his wife, who followed the business of catching and selling vipers, and offered themselves to be bit by any viper that should be procured, trusting to the virtue of a remedy they had

HAVING mentioned the viper, it may not be improper to give a description of that serpent,

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had accidentally hit on in trying various things, which was only oil of olives, known by the name of *fallet-oil*, from it's being frequently used with *fallet*. On the 1st of June, 1734, in the presence of a great number of persons, the said William Oliver was bit by an old black viper or adder, brought by one of the company, upon the wrist and joint of the thumb of the right hand, so that drops of blood came from the wounds. He said that he immediately felt a violent pain and shooting, both to the top of his thumb and up his arm, even before the viper was loosened from his hand, and soon after he felt a pain like that of burning. In a few minutes his eyes began to look red and fiery, and to water very much; and in less than half an hour he perceived the venom seize his heart with a pricking pain, attended with faintness and shortness of breath. Upon this he fell into violent cold sweats, and presently after his belly began to swell, with great gripings and pains in his back, attended with vomitings and purgings. During the violence of these symptoms he affirmed that his sight was gone twice for several minutes, but that his hearing continued all the while. He said that in his former experiments he had never deferred making use of his remedy longer than when he perceived the effects of the venom reaching his heart; but this time, being willing to satisfy the company thoroughly, and depending on the oil, which had never failed him, he forbore to apply it till he found himself exceeding ill and quite giddy. — About an hour and a quarter after he was bit, a chafing-dish of burning charcoal was brought in, and his arm held over it as near as he could bear it, while his wife rubbed in with her hand the *fallet-oil*, which Dr. Mortimer had brought along with him, lest they should privately add any thing to it. By this means the pain soon abated, though the swelling did not much diminish, and violent vomitings and purgings ensued, with a low and interrupted pulse, so that the physicians present thought proper to give him several cordial draughts, from which he was not sensible of any great relief, but by drinking a glass or two of oil he seemed to have some ease. In this dangerous condition he was put to bed, and his arm again bathed over a pan of charcoal; but, continuing to complain much of his back and belly, the doctor advised his wife to rub them with *fallet-oil* heated, which she did accordingly,

famed not only for the exceeding venomousness of it's bite, which is one of the most dangerous poisons in the animal kingdom, but also for the great usefulness of it's flesh in medicine. This remarkable reptile has the biggest and flattest head of all the serpent kind, it's snout being not unlike that of a hog, with sixteen small immoveable teeth in each jaw, besides two other large, sharp, hollow, canine teeth, situate on each side of the upper jaw, which are those that do the mischief. These are flexible in their articulation, and are commonly laid flat along the jaw, the animal never raising them but when it would bite; and the roots or bases of them are encompassed with a little bladder, containing a yellow insipid salivous juice, which is the poison. It is about half a yard long,

cordingly, whereupon he declared he found immediate ease, and his vomiting and purging soon abated. He then fell into a sound sleep, which was interrupted by persons coming to see and inquire after him till about twelve o'clock, from which time he slept continually to five or six next morning, when he awoke and found himself perfectly well. On the 3d of June indeed his arm remained swelled, and looked red, with spots of yellow, but felt soft, and he had the perfect use of it, and even of his fingers, no pain or stiffness remaining.—These viper-catchers said they had experienced their remedy to take effect on cows, horses, and dogs, ten hours after being bit; but as to themselves, being frequently bit, they always carried a phial of sallet-oil along with them, and bathed the wound immediately. If it was in the heel, they wetted the stocking thoroughly with the oil; if in the finger, which happened oftenest, they poured some oil into that finger of their glove, which they put on again, and thus never felt any farther inconvenience from the accident, not even so much as from the sting of a bee.—The experiment was made upon the same man in the town-hall at Windsor, before Dr. Derham, Dr. Waterland, the physicians, surgeons, and apothecaries of that town, and several other gentlemen in the neighbourhood; all the symptoms of a viper-bite ensued, and the remedy was applied with the promised success.

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and an inch in thickness; has only one row of teeth, whereas other serpents have two; and it's body is not fetid, though the inner parts of other serpents stink intolerably. It creeps slowly, and never leaps, like the rest of the serpent-kind, but is nimble enough to bite when it meets with provocation. The scales under it's belly are of the colour of well polished steel, and the rest of the body is ash-coloured or yellow, the ground speckled with brownish spots. The viper is a viviparous animal, bringing forth her young-ones wrapped up in thin skins, which break on the third day, and set them at liberty. She commonly brings forth to the number of twenty, but only one each day. Pliny, Galen, and others of the ancients, believed that the young killed their mother in the delivery; but this is not the only mistake they were guilty of on the subject of the viper, for they supposed it eat cantharides, scorpions, &c. which rendered it's poison so very dangerous.

As to the manner in which the viper conveys it's poison, authors are somewhat disagreed. Redi and Charras have each of them wrote curious pieces on the subject, but their hypotheses are very different. Redi maintains, that all the venom of the animal is contained in the little bags or bladders before-mentioned, at the bottom of the two canine teeth; from whence, upon biting, the yellowish liquor is squeezed out into the wound, where, mixing with the blood and other juices, it produces so many dreadful symptoms. Charras, on the other hand, maintains that this liquor is not poisonous; that he has given it to pigeons, without their being at all disordered by it; that he has found the viper's bite mortal to animals after the bags have been taken clear out, as well as before; and lastly, that the poison lies in the irritated spirits
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of the viper, which it exhales in it's biting, and which are so cold that they curdle the blood, and stop the circulation. These opposite systems are both supported by a number of well-attested experiments ; but the public generally give into that of Redi, as answering best to the mechanism of the parts. Dr. Mead supposes it to be the true one ; and adds to Redi's account, that the viper's poison is separated from the blood by a gland lying behind the orbit of the eye, from whence there is a duct that conveys the poison to the bags at the teeth. These teeth, he observes, are tubulated for the conveyance and emission of the poison into the wound, though their hollowness does not reach quite to the tip of the tooth, but ends in a slit a little below the point, out of which the poison is emitted.—Galen says, that the mountebanks in his days used to stop these perforations of the teeth with a kind of paste, after which they would expose themselves to be bitten without danger.

THE reader will perhaps think he has been long enough detained in viewing the animals of Barbary ; we shall therefore change the scene, and proceed, according to our method, to survey some of the most remarkable antiquities to be met with in that part of Africa.

ANTIQUITIES.

A GREAT number of curiosities of this kind are scattered up and down those countries which were once possessed by the ancient Romans, as may be seen in Dr. Shaw's geographical observations on the kingdoms of Algiers and Tunis. Spaita, the ancient Sufetula, says the doctor, is one of the most remarkable places in Barbary for the extent and magnificence of it's ruins ;
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amongst which, at a furlong's distance to the eastward, there is a sumptuous triumphal arch of the Corinthian order. From this arch, all along to the city, there is a pavement of large black stones, with a parapet-wall on each side, probably intended to make the entry of the triumpher more commodious. At a little distance from the end of this pavement stands a beautiful portico, built in the same manner as the triumphal arch, which leads into a spacious court, where we see the ruins of three contiguous temples, whose roofs, porticoes, and fore fronts are broken down, but all the other walls, with their proper pediments and entablatures, remain perfect and intire. In each of them there is a niche, which fronts the portico; and behind that in the middle temple is a small chamber, which perhaps served for a vestry. Our author has given us a fine draught of these venerable ruins.

AT a place called Jemme, in the kingdom of Tunis, there are several antiquities; as altars with defaced inscriptions, a variety of columns, a great many trunks and arms of marble statues, one of which is of the colossal kind in armour, another a naked Venus like the Medicean, both without heads, but apparently the workmanship of good masters. What this place is most remarkably distinguished by, are the remains of a spacious amphitheatre, consisting originally of sixty-four arches and four orders of columns. The upper order, which Dr. Shaw supposes might be no more than an Attic, hath suffered by the Arabs; and four arches have been blown up from top to bottom by a bey of Tunis, in a revolt of the Arabs, who made use of it as a fortress; otherwise, as to the outside at least, nothing could be more intire and beautiful. The platform of the seats and the galleries are still remaining; and, by comparing
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this with other ancient structures, it seems to have been built about the time of the Antonines, agreeing exactly in proportion and workmanship with the buildings of that age.

BESIDES some ancient cisterns and common sewers, there are scarce any tokens left of the magnificence of Carthage, the rival of Rome. We meet with no triumphal arch, says our author, or sumptuous piece of architecture; no granite pillars, or curious entablatures; but the broken walls and structures now remaining are either built in the Gothic manner, or according to that of the later inhabitants. Adjoining to the large public cisterns, indeed, which were near the western wall of the city, we see the ruins of an ancient and celebrated aqueduct, which may be traced to the distance of at least fifty miles. It has been a work of extraordinary labour and expence; and that part of it which runs along the peninsula, whereon Carthage was built, was beautifully faced with hewn stone. At Arriana, a little village two leagues to the northward of Tunis, several arches of this aqueduct are intire, which Dr. Shaw found to be seventy feet high, and the pillars that supported them sixteen feet square. The channel that conveyed the water lies above these arches, being vaulted over, and plaistered with a strong cement. A person of an ordinary size may walk upright in it; and there are holes left at certain distances, both for the admission of fresh air, and the conveniency of cleansing it when necessary.

OVER the fountains that supplied this aqueduct with water there were temples erected, of which there are still some remains. One of them, which by it's ornaments appears to have been of the Corinthian order, ends very beautifully in a dome, wherein

wherein are three niches, probably intended to receive statues of water-nymphs or other deities, supposed by the ancients to preside over fountains. The aqueduct however appears to be of much greater antiquity than the temple, having probably been a work of the Carthaginians; it being difficult to conceive how Carthage could well subsist without such a convenience.

IN the kingdom of Algiers, near a town called Shershell, lie the ruins of a large city, which, according to a tradition in that country, was destroyed by an earthquake. We may conceive no small opinion, says our author, of it's former magnificence, from the fine pillars, capitals, capacious cisterns, and beautiful mosaic pavements that are still remaining. It was supplied with water brought by a large and sumptuous aqueduct, little inferior to that of Carthage in the height and strength of it's arches; several fragments whereof, scattered amongst the neighbouring mountains and vallies, continue to be so many incontestable proofs of the grandeur and beauty of the work. There are two other conduits still subsisting, which furnish Shershell with excellent water from the mountains, and may be considered as two inestimable legacies of the ancients.

AMONG the ruins of Tlemsan or Tremesen are found several shafts of pillars, and other fragments of Roman antiquities; and in the walls of an old mosque are a number of altars dedicated to the Dii Manes, but our author saw but one legible inscription. Most of the walls of Tlemsan have been moulded in frames, and consist of a mortar made up of sand, lime, and small pebbles, which, by being well tempered and wrought together, is become equal to stone in strength and solidity. The several stages and removes of these frames

are still discernible, some of them being a hundred yards long, and a fathom in height and thickness.

AT a place now called Kasbaite, an old Roman city, there are many fragments of ruins and antiquities, and amongst the rest there is part of the portico of a small temple, dedicated perhaps to one of the Roman empresses, as Dr. Shaw conjectures from a broken inscription. A little to the southward are several sepulchral monuments, most of which have been beautifully carved into a variety of figures in basso relievo, who are represented mourning, offering incense, or performing some office to the dead; and below the figures lie the inscriptions.

ALL over a large knot of hills called Aurefs, lying to the southward of Constantina, are spread a number of ruins, the most remarkable of which are those of L'erba or Tezzoute, near three leagues in circumference. Here we find a great variety of antiquities; for, besides the magnificent remains of several of the city-gates, Dr. Shaw observed the seats and upper part of an amphitheatre; the frontispiece of a fine Ionic temple dedicated to Esculapius; a large oblong chamber, with a great gate on each side, intended perhaps for a triumphal arch; and a little beautiful mausoleum, built in form of a dome, supported by Corinthian pillars. These and other edifices of the like nature sufficiently demonstrate the once flourishing state of this city, which appears to be the Lambesa of the ancients. Our learned author has copied several Roman inscriptions found among these ruins.

ABOUT Constantina, the ancient Cirta, we meet with a great many remains of antiquity, particularly on a neck of land to the south-west, which is intirely covered with a series of broken walls, cisterns,

cisterns, and other ruins. Besides these, there are still remaining, near the center of the city, a set of cisterns about twenty in number, making an area of fifty yards square, which our author supposes received the water brought to them by a now ruinous aqueduct, the fragments whereof demonstrate the public spirit of the people of Cirta in erecting a structure that must have required such an immense quantity of materials.

UPON the edge of a precipice to the northward are the remains of a stately edifice, at present occupied by the Turkish garrison. Four bases of pillars, seven feet in diameter, with their respective pedestals, are still in their places, and seem to have belonged to the portico. They are of a black stone, little inferior to marble, probably hewn out of the range of rocks on which they are founded.

THE side posts of the principal gate of the city are of a reddish stone, as beautiful as marble, and very neatly moulded and pannelled. An altar of pure white marble makes part of a neighbouring wall, and on that side which is in view is carved, in relievo a well-shaped simpulum, a vessel used by the ancients in their sacrifices. The gate toward the south-east is in the same fashion and design, but much smaller.—The bridge (says the doctor) was a master-piece in it's kind, having had the gallery and columns of the arches adorned with cornishes and festoons, ox-heads, and garlands. The key-stones of the arches are also charged with Caducei and other figures; and between the two principal arches there is a well-executed bas-relief, representing a lady treading upon two elephants, which have their faces turned towards each other, and twist their trunks together. She has a large scollop-shell over her head, appears dressed in a

close-bodied garment like the riding-habit of our times, and with her right hand raises up her petticoats, looking scornfully upon the city.

As to the city of Algiers itself, of whose antiquities the reader may perhaps expect an account, our author, whose observation nothing seems to have escaped, tells us there are few to be met with in that city, and little that merits the attention of the curious.

THE other parts of Barbary, besides those which Dr. Shaw had the opportunity of viewing, especially near the sea-coast, are not destitute of antiquities, though they are not to be met with in any great abundance. We have therefore little to add on this subject from the kingdoms of Fez and Morocco, and so much the less, as we have not the same excellent guide to conduct us through those countries. It may not be improper, however, to mention a curiosity of the ancient kind, a few miles distant from Tangier, where there is a vast hole like a coal-pit, many fathoms deep, which leads into a great number of subterranean apartments, all lined with marble. These, from the many statues, urns, and old Punic inscriptions that have been found in them, were undoubtedly repositories for the dead, like the catacombs in Italy and Egypt; which having been sufficiently spoken of in their proper places, we need not enlarge upon these of Barbary.—But having said so much of the remains of it's ancient structures, let us now take a view of some of it's modern.

BUILDINGS.

WE shall begin this article with the imperial palace in the city of Morocco, the metropolis of that empire. This palace resembles a fortress,

fortress, being surrounded by a ditch and high walls, flanked with towers and other works. The walls have but two gates, both large and stately, the one looking towards the country, the other to the city. The royal apartments are covered with leaf-gold, especially about thirty large halls or rooms of state, and the sumptuous galleries leading from one to the other. The gardens are very beautiful, being adorned with fish-ponds, terraces, and every embellishment that is grand and delightful in the Moorish taste.—In the midst of this fortress stands a magnificent mosque, remarkable for its largeness, its brazen gates, and other ornaments, but especially for its high tower, on the top of which were formerly four golden balls, one above another, fixed on a strong bar of iron which ran through them all. The lowest was biggest, the second but half as big, and the other two lessening in the same proportion. The body of the balls was of copper, but plated all over very thick with gold, and all the four together weighed seven hundred pounds. They are said to have been set up by a daughter of the king of Gago, married to a king of Morocco, who is reported to have sold all her jewels to defray the expence of this whimsical ornament; which being done by the direction of some pretended conjurer, under a proper constellation, the superstitious people imagined it would be very dangerous and unfortunate to remove them; insomuch that, one of their kings having resolved to take them down to pay his troops, the people strenuously opposed it, offering rather to sell their wives and children to raise him money. However, Marmol tells us, that, when he was there, Muley Hamed, more covetous than superstitious, caused the highest to be taken down, the gold whereof was sold to a Jew for twenty-five thousand

thousand pistoles, and the copper, being just gilt over anew, was put up again to suppress the murmuring of the people. The Jew, it seems, was found hanged on the tower; and it was given out that this was done by demons who had the care of the balls: And, Muley Hamed losing both his crown and life soon after, his misfortune was supposed to be owing to that covetous action. Notwithstanding this, the late Muley Ishmael ventured to have them taken down, and put into his treasury.—This, with some other mosques chiefly built of marble and leaded on the top, a few colleges and hospitals, and a handsome bridge, is all that is left of the ancient splendor of this City, which is run to such decay that many of the streets are quite uninhabited.

AMONG the vast number of mosques in the city of Fez, which some compute to be above five hundred, there are reckoned fifty of the first rank, all of them well built and endowed; one of which, according to Gramaye, is half a league in compass, and has thirty large gates. The minaret or tower belonging to it is of a prodigious height, and supported by fifty stately pillars. The body of the building is covered with seventeen principal arches or roofs, besides a vast number of inferior ones, all of them together sustained by fifteen hundred large columns of white marble. A vast number of lamps, some of a prodigious size, are kept continually burning in this mosque; and the cisterns for people to wash in, before they go to prayer, are said to be four hundred. It stands in the heart of the town, and is esteemed the largest and richest in all Barbary. Within the inclosure of this mosque there is likewise a stately college, and the public buildings of the city in general are beautiful and majestic.

MEQUINEZ,

MEQUINEZ, the present capital of the empire and the residence of the imperial court, is situated in the kingdom of Fez, and has a palace about four miles in circumference, seated in a spacious plain. The buildings are of rich mortar, without either brick or stone, except for pillars and arches; and the mortar is so well wrought that the walls resemble one intire piece of terrace; they were formed in wooden cases, with which the mortar was rammed down by the Christian slaves, much in the same manner as the paviers among us drive down the stones: all raising together heavy pieces of wood, and keeping time in their strokes. These wooden cases were built higher as the walls rose; and, when they were finished, and dry enough to stand firmly without them, were removed. The whole building is exceeding massy, and the outer wall which surrounds the whole, is twenty-five feet in thickness. Mr. Windus, who was in the retinue of Charles Stewart, Esq. ambassador to the emperor of Morocco in 1720, observes, that he attended his excellency to see the palace, when they passed through some large rooms filled with men and boys, making saddles, stocks for guns, &c. and, having passed through several large neat buildings, at length entered the most inward and beautiful part of the palace, where all the columns, which form a colonade of vast length, are of marble, and are said to be ancient Roman pillars brought thither from Sallee: the arches and doors of the apartments are finely ornamented. From thence they were conducted to another neat regular building with piazzas all round. The area was checker work, and in the middle was a row of marble basons at certain distances, with little channels cut in stone, conveying water from one to the other.

other. They afterwards visited the inside of an apartment which had been formerly the residence of one of the queens, and saw the baths and some beautiful cobahs belonging to that apartment. These cobahs are lofty and magnificent rooms, each covered with a dome painted with a sky blue, adorned with stars and a golden sun in the middle, of curious workmanship. From thence they proceeded through several other buildings, chiefly consisting of oblong squares with piazzas; under which the doors enter into the lodgings, which are generally ground rooms; the doors of each building being all of one size and form finely inlaid, and some of them gilt. In one of these squares was a fountain with channels of marble, forming a neat labyrinth.

THE palace of the bashaw of Tetuan, a city of the kingdom of Fez, is much admired by travellers, and seems worthy of a description. The entrance into this magnificent structure is through a cloister, which leads to a great square surrounded by a piazza, in the middle of which is a marble fountain. The pavement of the area, and of the piazza, is of mosaic work; on each side of the square is one large room, and at each angle a square tower of a considerable height above the building, in two of which are stair-cases that lead to the grand apartments. In the third is a door that leads to a mosque; and in the fourth another, through which we pass into the gardens. On each side of the galleries above, which run over the piazza, are fine apartments for the bashaw's wives, each apartment consisting of five rooms, viz. one large room covered with a cupola, in the center of four lesser rooms; and through these are doors that lead to the bagnios of the women, and the lodgings of the female slaves. Both the doors and cielings of the house are very lofty, and over
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the women's apartments are four noble terrace-walks, which over look the town, a deep valley beneath it, and part of the Mediterranean. At the end of each terrace there is a turret with lattices, where the women sit to work, and can see all that passes without being seen. In the evening the ladies usually walk in the garden, where several of the walks are shaded with vines turned over in the form of arches, the walls of the garden being so high that they cannot be over looked from any part of the town.--To this account of the bashaw's palace let us add an observation of a certain author, that the Moors of quality have scarce any pleasures, but what they take in their women, houses, gardens, and horses : Conversation with men is what they do not relish ; the reason of which is supposed to be, that their law prohibits them wine, without which good humour and sprightly discourse cannot be long maintained.

WE have lately observed, that the great mosque at Fez is looked upon as the most superb structure of that kind in Barbary ; but Dr. Shaw says, that one at Kairwan or Kairoan, in the kingdom of Tunis, is accounted the most magnificent, as well as the most sacred, of any in that country. The inhabitants told the doctor (for a Christian is not permitted to enter the mosques of the Mahometans) that it is supported by at least five hundred granite pillars ; and yet, among the great variety of columns, and other ancient materials employed in this large and beautiful structure, he could not be informed of one single inscription.—However, we thought proper to mention it, as it is undoubtedly a most majestic edifice.

WE apprehend we cannot conclude this article more agreeably, than by extracting from Dr. Shaw,
to

to whom we are already so much indebted, an account of the method of building both in Barbary and the Levant, which seems to have continued the same, from the earliest ages, without the least alteration or improvement. For, as there is a near relation between the present Moorish buildings and those that are occasionally mentioned in the Holy Scriptures, it is presumed that an account of the structure and contrivance of the former may contribute to the clearing up some difficulties that have arisen from not rightly comprehending the fashion of the other.

LARGE doors, spacious chambers, marble pavements, cloystered courts, with fountains in the middle, are certainly conveniencies, says the doctor, very well adapted to the circumstances of these climates, where the summer-heats are generally so intense. Besides, the jealousy, which masters of families commonly entertain, is less liable to be alarmed, whilst all the windows open into private courts, except sometimes a latticed window or balcony towards the street, which are only opened during the celebration of some public festival.—But to come to a more particular description of the Moorish and Eastern buildings.

IF we quit the streets of their cities, which are usually narrow, with sometimes a range of shops on each side, and enter into any of the principal houses, we first pass through a porch or gate-way, with benches on each side, where the master of the family receives visits and dispatches business; few persons, not even the nearest relations, having admission farther, except upon extraordinary occasions. We next advance into the court, which, lying open to the weather, is paved with stone or marble, according to the owner's ability, in order

order to carry off the water*. This court is made use of to receive large companies, as upon the celebration of a marriage, the circumcision of a child, or such-like occasions; and it is then strewed with mats or carpets for their more commodious entertainment. It is likewise usual at these times to have the court sheltered from the heat or inclemency of the weather, by a veil, as the doctor calls it, which, being expanded upon ropes from one side of the parapet-wall to the other, may be folded or unfolded at pleasure †.

THE court is generally surrounded with a cloister, over which, when the house has one or more stories, a gallery is erected of the same dimensions, having a balustrade, or a piece of carved or latticed work, going round about it. From the cloister and gallery doors open into large chambers, of the same length with the court, but seldom or never communicating with each other. A whole family frequently lives in one of these chambers, which makes their cities so exceeding populous, that the plague always sweeps away great numbers.

PEOPLE of better fashion hang the chambers of their houses with velvet or damask from the middle of the wall downwards, the rest being adorned with ingenious wreathings and devices in stucco and fret-work. In such houses the cieling is usually of wainscot, either curiously painted,

* There is something very analogous, as our author observes betwixt this open space in the Moorish buildings and the impluvium or cava adium in the Roman architecture; both of them being alike exposed to the weather, and giving light to the house.

† To some covering of this kind, says Dr. Shaw, the psalmist seems to allude, in that beautiful expression of spreading out the heavens like a curtain.

or thrown into pannels with gilded mouldings and scrolls of the Koran intermixed. The floors are laid with painted tiles or plaister of terrace; and, as they do not use chairs, but sit cross-legged or lie at length upon these floors, they have them constantly spread with carpets, sometimes very rich and beautiful. For their farther ease a row of damask or velvet bolsters is ranged along each side of the floor; and at one end of each chamber there is a little gallery, raised four or five feet above the floor, with a balustrade in the front of it, where their beds are placed.

THE stairs are sometimes in the porch, sometimes at the entrance into the court; and, when there is one or more stories, they are continued through a corner of the gallery to the top of the house, which is always flat, and covered with a strong plaister of terrace, from whence the rain-water falls into cisterns below the court. The terrace is surrounded by a wall breast-high, or else with balustrades or latticed-work, to prevent people's falling down; for upon these terraces they hang their linen to dry, prepare figs and raisins, enjoy the cool breezes of the evening, converse with one another, and offer up their devotions. By this means, when one of the eastern cities is built upon a level spot of ground, a man may pass from one end of a street to the other along the tops of the houses. Such is the manner and contrivance of the Eastern houses in general; from whence Dr. Shaw takes occasion to explain the case of the paralytic said to be let down through the roof, Luke v. 19.) which circumstance has lately given great offence to some persons. This pretended difficulty the doctor very learnedly removes, by shewing there is no necessity to suppose that a breach

breach was made in the tiling, or any thing of that nature; but that the patient was carried to the top of the house, and thence, after the veil above-mentioned was drawn away, let down through the opening into the midst (of the court) before Jesus.

To most of these houses a smaller one is annexed, which sometimes rises one story higher than the house, and at other times consists only of one or two rooms and a terrace; whilst others are built over the porch, and, except the ground-floor, have all the conveniences of the larger house. From these there is a door of communication into the gallery of the house, kept open or shut according to the master's discretion; besides another door, which opens immediately from a privy-stairs down into the porch or street, without giving any disturbance to those in the house itself. In these back-houses strangers are usually lodged and entertained; in them the sons of the family are permitted to keep their concubines; and thither the men are wont to retire from the hurry and noise of their families, to be more at leisure for meditation or diversions.

WITH respect to the mosques of these countries, the doctor tells us they are built exactly in the fashion of our churches, but, instead of using seats and benches as we do, they only spread the floor with mats, upon which they perform their devotions. Near the middle of a mosque, particularly the principal one of each city, there is a large pulpit balustraded around with an ascent to it of about half a dozen steps. Upon these, for our author was informed that no person is permitted to enter the pulpit, one of their priests places himself every Friday, which they call the day of the congregation,

gation, and either explains some part of the Koran, or exhorts the people to piety or good works. There is a niche in that part of the mosque which stands towards Mecca, whither the people direct themselves during the whole course of their devotions; and this niche, as a judicious writer conjectures, represents the presence and at the same time the invisibility of the Deity. The mosques have minarets or towers, as we have often mentioned, which a cryer ascends at the appointed times, displays a small flag, and advertises the people with a loud voice of the hour of prayer.

OUR author makes one observation farther with regard to the buildings above described, viz. that both the plaister and cement which are made use of, particularly where extraordinary strength is required, are, according to trial and appearance, of the same consistence and composition with those of the ancients. Those cisterns, adds he, which were built by sultan Ben Eglib, in several parts of the kingdom of Tunis, are of equal solidity with the famous ones at Carthage; continuing to this day, unless where they have been broken designedly, as firm and compact as if they were but just finished. The composition, says the doctor, is this: They take two parts of wood-ashes, three of lime, and one of fine sand; which, after being well sifted and mixed together, they beat with wooden mallets for three days and nights incessantly, sprinkling them alternately with a little oil and water, till they become of a due consistence. This mixture is chiefly used in their arches, cisterns, and terraces; but they use tow and lime beat together with oil only, without any water, to join the pipes of their aqueducts. Both these compositions soon grow hard as stone, and suffer no water to pervade them.

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The Natives of BARBARY.

THE extensive country of Barbary is chiefly inhabited by three different sorts of people; the Moors, who are the original inhabitants; the Arabs, who long ago over-ran the country; and the Turks, who have made themselves masters of some of the best provinces, and rendered the kingdoms of Tripoli, Tunis, and Algiers, tributary to them. There are also settled here a variety of foreign nations, as Christians, Jews, and others, with an innumerable multitude of renegadoes, who have renounced their faith. The greatest part of the Moors are said to be involved in ignorance and superstition, and to be treacherous, fraudulent, and deceitful. Indeed the cruel oppressions they suffer under their tyrannical governments have greatly contributed to their degeneracy; they being crushed, on the one hand, by a heavy load of taxes, and treated with the utmost cruelty by their governors; while, on the other, they are exposed to the inroads of the Arabs, who strip them of the small pittance they are able to lay up; whence they dare not provide more than is barely sufficient to serve them the year round, lest their plenty should induce those robbers to visit them the oftener, or their landlords to raise their rents. Hence, if from an unexpected good crop, they obtain more corn than they want, they take the utmost pains to conceal it, by burying it underground, or stowing it in caverns; whence they are in danger of being bastinadoed and tortured, or both, to oblige them to discover it; and to avoid all this they are contented to live in the most pinching poverty. Few situations appear more adapted to depress the human mind, and render mankind

mankind compleatly miserable. Yet it is here far from producing this effect; for, from their unparalleled patience, peace and contentment reign in every family; and it is even said, that their oppression and misery have not yet obliged them to introduce into their language any expressions of discontent, or repining at their unhappy condition; much less of curses and imprecations against the authors of their distress. On seeing a circle of them sitting at the doors of their poor cottages almost naked, some either smoking or telling merry tales; others singing or dancing, and when weary, lying supinely on the ground; one would conclude them to be a happy, though a lazy people. Besides, they seldom quarrel or fight among themselves; and, when they do, they use no other weapons but their fists.

THOSE we have here described live chiefly in the country, where they are employed in agriculture and the breeding of cattle; but those who live in the sea-port towns along the coast, follow a variety of trades and manufactures, and even carry on some commerce by sea and land; but, though these are less poor, they are equally oppressed with taxes, and, if possible, more cruelly treated by their lordly masters; for the least mark of disrespect to the meanest soldier is sufficient to procure them, if poor, the chastisement of the bastinado, or a heavy fine, if rich.

WITH respect to the Turks, these are by far the fewest in number, and also the worst and most contemptible: they being a wretched crew of indigent, ragged, thievish, and idle fellows, enlisted in and about Constantinople, and sent into Barbary once in three years, to recruit the soldiery. These wretches, being furnished with a gun, a sword, and other arms, are incorporated into some regiment, and instantly obtain a vote and share in the

the government; and from thence are raised from one post to another, till they obtain those of admiral, vizier, and even bey; in all which, they treat with insupportable insolence their Moorish vassals; the wealthiest of whom tremble at the sight of a Turkish common soldier.

THIS will be sufficient to give some idea of the inhabitants of Barbary in general, particularly of the Moors in those countries, where they are in subjection to the Turks; but it will be proper now to give some account of the Moors of Morocco, where they may be considered as masters, they not being subject to any foreign power.

THE Moors of this empire are chiefly descended from those who were driven out of Spain; and, though, in general, poor and oppressed, are very numerous, especially on the sea-coast; but have no trading vessels, nor carry on any immediate commerce with foreign nations. The men are of a swarthy complexion, intermixed with a race of well-looking people, somewhat fairer than the rest.

THEY wear short shirts with very broad sleeves, that sometimes hang down; but are more frequently tucked up to keep them cool. They have linen drawers tied about their waist next the skin; and, over their shirt, wear a kind of waistcoat made to fit close to the body, and fastened with small buttons and loops, set close together, and often embroidered with gold or silver thread. Round the waist, they tie a scarf of silk or stuff, in which they stick large knives, with the handles either of some valuable metal, or ivory inlaid, and their sheaths are tipped with silver. Their outer garment is either a piece of fine white woollen stuff, five or six yards in length, and about one and a half broad, which they wrap round them above and below

their arms : or a kind of short cloak made of cloth or woollen napped stuff, with the bottom and sides edged with a deep fringe ; and at the neck behind hangs a peaked hood, with a tassel at the end, with which they can cover their heads, to keep off the weather. They have always their heads shaved, and wear a little red cap, which they make into a turban by rolling muslin about it ; but, when they go into the country, they wear a cane hat to keep off the sun. They all go bare-legged, but wear slippers of red or yellow leather, without heels. The Moors of Morocco in general dress after this manner, with no other difference than in the richness and fineness of the stuffs, only the upper garment worn by the poor, is a coarse, thick woollen cloth, with holes at the top, instead of sleeves, to put their arms through, this reaches to their knees, and hangs loose about their bodies.

THE women, when they go abroad, dress nearly like the men, their upper garment being the cloak just mentioned, with the hood of which they cover their heads, bringing it down over their foreheads close to their eyes ; and underneath tie a piece of white cloth to hide the lower part of the face. It covers all but their legs, which, when they are at home, or pay a visit from the tops of their houses, are generally naked ; only some ladies of superior rank, have their drawers so long, that they reach to their feet, and hang in great loose folds about their legs. They wear the same kind of slippers as the men ; within doors they have only a single binder about their foreheads ; and their hair hangs behind in two large plaits at full length. They also wear at home a vest, open from the bosom to the waist, to shew their embroidered shifts. They have a short petticoat over their drawers, large ear-rings

ear-rings in their ears, with bracelets on their arms and legs.

THE Moors of Morocco are generally lusty, strong-limbed, active, laborious, and endure with surprizing resolution, the heat of summer, and the cold rains of winter. Thus a messenger will go from Tetuan to Mequinez, which is a hundred and fifty miles, for a Barbary ducat, worth three shillings and six-pence; and when caught in a storm of rain, will only look out for a bush, or a high stone, and sitting down on his hams, with his back towards it, remain the whole night in that posture, or if the weather be fair, will wrap himself up in his cloaths, and pass the night sleeping on the grass. It is said that some footmen will go a hundred and eighty miles in three days, they swim the rivers even in the depth of winter, if not deterred by the rapidity of the current; and when they take a journey that will last seven or eight days, carry only a little meal and a few raisins or figs in a small goats skin. They have no posts for carrying letters, which are sent by these footmen, who are almost as expeditious as horses: nor have they any kind of wheel carriage; for they remove their light goods from place to place, on horses; but make use of camels when they convey large quantities of corn, hides, or the like, a considerable distance.

WHEN the inhabitants of Morocco are in their houses, they are always sitting or lying on mats; and if they ever go out on foot, it is never farther than to make a visit, unless their business requires it; but those who have leisure, daily spend five or six hours before their doors, sitting on their hams, for they think nothing can be more ridiculous than for any one to walk up and down a room “ Why, say they, should a man remove from one

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“ end

“ end of a room to the other, without the least
“ reason for it? Can any thing be more absurd,
“ than for him to go to the other end merely to
“ come back again?” It is here esteemed so shameful for a man to make water in a standing posture, that those who are found guilty of it, are excluded from being evidence in any trial. This is probably to prevent any drop of their urine falling upon their cloaths, which they esteem a legal defilement; and therefore, when they make this evacuation, they carefully squat down like the females.

IN no part of the earth is there a more despotic government than that of Morocco; their religion, laws, customs, and prejudices, all conspiring to render the monarch absolute, and to confirm the subjects in the most abject slavery. The king or emperor, who has the title of sharif, has not only an uncontrollable power over the lives and fortunes of his subjects, but even over their consciences; for, as the successor of Mahomet, he is the principal interpreter of the Koran. His laws are therefore received with an implicit and religious submission. His subjects are even bred up with the notion, that those who die in the execution of his commands, are immediately admitted into paradise; and those who have the honour to die by his hand, to a still greater degree of happiness there. The tyranny of the emperors of Morocco is chiefly exercised on the Moors and slaves; for the Arabs who pay an involuntary tribute, are not to be treated with such rigour. The zeal and attachment of the negroes, who enjoy the principal power at court, intitle them to better treatment, and the monarch, who commits his person, treasure, and concubines to their care, encourages them, by his own example, to tyrannize over and oppress the natives.

THE Moors here, like the other Turks, pay the utmost regard to the name of God, and express great abhorrence of the impious custom, so common among many who call themselves Christians, of swearing upon the most trivial occasions, which the greatest resentment cannot provoke them to; much less to use blasphemous and indecent expressions, in speaking of the Supreme Being; nor are they ever guilty of duelling or murder; they never kill but in war; and it is with the utmost reluctance that they ever engage in battle with those of their own religion.

LEAVING the Moors of Morocco, we shall now give a concise account of those of Algiers, which is inhabited by many different people, but the most numerous are the Moors and Arabs. The Moors, thus called from Mauritania, their ancient country, are of two sorts; those who inhabit the cities and towns, carry on some commerce either by land or sea; and also engage in trades and manufactures. The other sort are of the wandering kind, and are divided into a prodigious number of tribes, distinguished either by the names of their chiefs, or the places of their abode, or both; each forming a kind of itinerant village, or adowar, as they term it; and every family living in a particular tent, or portable hut. They live solely on the produce of such lands as they farm from the other Moors, and pay their rent in kind, either in corn, fruit, herbs, honey, or wax; selling the remainder to the inhabitants of the neighbouring towns. They are skilful in the choice of the most advantageous soil; and take great care to avoid the neighbourhood of the Turkish troops. Each adowar pays the Turkish dey a tax in proportion to the number of its families, their chief being answerable to him; and the whole community for each individual.

dual. These wandering Moors are generally strong, warlike, and skilful horsemen, valuing themselves on not being confined to towns, like the other Moors of Algiers, whom they regard as slaves always at the mercy of the Turks; so that if they receive any insult or ill usage from the Turkish aga, they instantly return it in a hostile manner, till the town Moors, who are unable to subsist without being supplied with provisions from them, have mediated a peace between them. To keep up this martial spirit, the chief persons of every adowar meet every evening in a circle round their chief, to discuss public affairs, after which they perform their usual exercises on horseback, in which these farmers are so dexterous, that they can take up any thing from the ground with their lance, in full speed. Their usual weapons are a broad cutlass, which hangs just below the left elbow, and a short lance, which they carry in their hand. These wandering Moors are so addicted to robbery, that it is dangerous travelling at a distance from the towns, without a guard or at least one of their marabuts or priests; for as they consider themselves as the original proprietors of the country, and as dispossessed by the rest of the inhabitants, they think they have a right to make reprisals.

THE Arabs who are scattered through all the provinces, not only of the Algerine dominions, but through the other parts of Barbary, are descended from the Mahometan Arabians, who once over-ran this part of Africa; from which being driven by the Turks, they fled to the mountainous parts to save themselves, their cattle and effects; where they have ever since enjoyed their liberty; and by their labour and industry, have improved these barren and desert lands into pleasant and
fertile

fertile territories. They are divided into a multitude of little governments under their respective chiefs ; and value themselves highly on their having preserved their blood untainted by a mixture with other nations ; expressing the utmost contempt for those, who preferring their ancient habitations, in cities and towns, submitted to a foreign yoke, whom they therefore, in derision, call citizens and courtiers.

IN this general view of the inhabitants of Barbary, it will doubtless be expected that we should not leave Algiers, without taking some notice of it's government and treatment of the Christian slaves.

THE dey of Algiers pays no other revenue to the grand seignior, than a certain number of handsome youths, and some presents annually sent to the Porte. He is chosen out of the army, in which the most inferior person has an equal right to that dignity with the highest ; for every bold and aspiring soldier, though but just taken from the plough, may be considered as heir apparent to the throne. Indeed the dey of Algiers is never ashamed of the meanness of his extraction ; thus Mahomet basha, who was dey of Algiers, when Dr. Shaw was there, entering into a dispute with the deputy consul of a neighbouring nation said, “ My mother cried sheep's trotters, and my father neats
“ tongues, but they would have been ashamed to
“ have exposed to sale so worthless a tongue as
“ thine.” He who aspires to this high rank, seldom waits till sickness or age has removed the present possessor ; it is sufficient if he be able to protect himself with the same scymetar which he sheathes in the bowels of his predecessor ; for scarce one in ten of them dies in his bed. Even the few, who have made a more peaceful exit, cannot be

said to have owed it to the high regard the army had for them, but rather to their foresight and good fortune, in nipping new insurrections in the bud. Neither their tyranny, mal-administration, or avarice, serve to hasten their ruin, nor can the contrary virtues prevent it. The want of success in the wisest and best conducted enterprise is sufficient to cause an insurrection, and cost the most sagacious dey or officer his life; nay, they are often slain from no other motive than a desire of change, raised by some bold aspirer to the supreme power. The deys, though they generally act in the most arbitrary manner, are frequently obliged to assemble and consult the divan on important affairs, in order to screen themselves from popular discontent; though, the chief members being for the most part his creatures, he may be said to act with a despotic authority, there being no appeal from this supreme tribunal. As the lowest soldier has a right to vote in the election of a dey, as well as the highest; and as there are usually several candidates for that dignity, the election is seldom carried on without some tumult, if not bloodshed; but the choice is no sooner fixed, than he who is elected, is saluted by the words "ALLA-BARIK," or "God prosper you;" and he is immediately invested with the castan or insignia of sovereignty; while the cadi, or chief judge, addresses him with a congratulatory speech, generally closed with an exhortation, that, as it has pleased the Almighty to raise him to the supreme dignity of the kingdom, it is his duty to govern it with justice and equity; to preserve the rights and liberties of his new subjects, and carefully to promote their safety and welfare.

THE Algerines are more formidable at sea than any other power along the coast of Barbary; and, though

though the commanders of their ships are not allowed to have any concern in affairs of state, or in the election of the dey, yet they are held in great esteem. However, their navy seldom exceeds twenty ships; only one of which belongs to the government, and is assigned to the admiral, who has particular store-houses: all the rest belong to private persons, and have likewise their store-houses well provided, the captains never failing to strip their prizes of all the conveniencies they find in them. It is not at all surprising, that a people, who consider all the rest of the world as their tributaries or slaves, should be so addicted to piracy, and treat their captives with the utmost arrogance and inhumanity. The captains of these ships have usually a share in those they command, if they are not the sole owners; and accordingly may cruize when they please; but are obliged, when required, to attend the service of the state, in transporting men or provisions, at their own expence. They have also some experienced officer, appointed by the dey, without whose consent they can neither give chase, return, nor punish their sailors. On their re-entering the port, this officer makes his report how the captain has behaved; and, if he is found guilty of any misdemeanor, is sure of being chastised. The captain must also give an account of his success to the government, which claims an eighth part of all the prizes, slaves, and cargo, the rest being divided among the proprietors and ship's company, in such proportions as are agreed upon between them.

THE Christians are no sooner made prisoners, than the Corsairs inquire into their country, condition, and quality, which is often done by bastinadoing them, to extort a true confession; after which having stripped them almost naked, they

are brought to the palace of the dey, to which the European consuls repair, in order to examine whether any of them belong to their respective nation ; and, if any of them were only passengers, to reclaim them ; but, if it be proved that they have served for pay, any nation at war with Algiers, they cannot be released without paying their full ransom. Of these the dey has the choice of every eighth man, and therefore chuses those who have some useful trades or professions ; as surgeon's mates, carpenters, &c. because they sell for a higher price ; and, if of quality, for a still higher. The rest, who are left to the owners and captors, are led to the besistan, or slave-market, where a price is set upon them, according to their ability, profession, age, and strength. From thence they are led to the court before the dey's palace, where they are sold by auction ; and whatever is bid above the price set upon them, belongs to the government. These unhappy men have then an iron ring put round one of their ancles, and a long or short chain fastened to it, according as they imagine them more or less inclined to attempt their escape : but if any of them can procure a little money, they are allowed to keep wine cellars ; but must pay a certain tribute to the dey, and by this means many of them grow rich enough, in time, to purchase their liberty, notwithstanding their being also obliged to contribute towards the maintenance of their poor sick brethren, and of the Christian chapels allowed for their use. With respect to those who can put themselves in no way of living, they are used with great severity ; they both fare and work hard all day, and at night are locked up in public prisons, where they lie on the bare ground, without any other covering than the sky, and are sometimes almost stifled in mud and water.

water. In the cities and towns, they are put to the lowest and hardest kind of labour; while in the country they are sometimes made to draw the plough instead of horses; and in all other respects are treated with such inhumanity, as would there be severely punished, if exercised on brutes.

WITH respect to the distribution of justice, the *cadi* is the judge; but all affairs of moment are laid before the *dey*; or in his absence, before a principal officer of the regency, who sits in the gate of the palace for that purpose. Here are no attorneys or counsellors to retard the administration of justice. When the women have any suit, they come veiled, crying aloud, Justice in God's name; and these are generally accompanied with a crowd of their own sex, to back the petition with their joint outcries. Justice is, however, administered in the most venal manner, in the punishment of offenders, particularly when they are Turkish soldiers, who behave with the utmost insolence, and commit acts of violence with impunity; for they seldom suffer for any crime except that of rebellion, in which case they are usually strangled with a bow-string. However, for smaller offences, they are sometimes either bastinadoed, fined, or their pay stopped, and if officers, reduced to the rank of common soldiers.

A JEW or Christian guilty of murder, or any other capital crime, is burnt alive, without the gates of the city; but for the same crimes the Moors and Arabs are either impaled, hung up by the neck over the battlements of the city, or thrown upon hooks fixed in the walls below, where they sometimes hang thirty or forty hours in the most dreadful agonies before they expire.

CLIPPING or debasing the coin is punished with cutting off the hands. Moors, found guilty of

robbery or burglary, have their right hand cut off; and, it being hung about their necks, they are made to ride through the city on an ass, with their faces towards the tail. The Jews and Christians, for speaking against Mahomet, must either turn Mahometans, or be impaled. The ancient inhuman custom of sawing in funder, is still retained: this is done by laying the condemned person between two boards of the same length and breadth, and beginning to saw at the head. Small offences are punished with the bastinado.

WE shall now lead the reader to a view of the Tunisiens, who are more polite and civilized, and intirely free from that haughtiness, insolence, and cruelty, for which the rest of the people in Barbary are justly censured. They are more kind to their slaves, except the knights of Malta; and are in other respects very courteous to strangers; and indeed this nation has for many years been more intent upon trade, and the improvement of manufactures, than upon plundering and cruizing.

THE greatest part of the Moorish women of Tunis would be esteemed beauties, even in England; and their children have the finest complexions of any nation whatsoever; but the boys are so exposed to the sun, that they soon attain the swarthiness of the Arabs; but, as the girls keep more at home, they preserve their beauty till they are thirty, when they are generally past child-bearing. One of these girls is sometimes a mother at eleven, and a grand-mother at two or three and twenty; and, as they generally live as long as the Europeans, they sometimes see their children of many generations.

THE merchants, officers, doctors, and scholars here, appear neatly dressed when they go abroad; but behave with such gravity and good manners, that,

that, though the streets are crowded with people, one may go from one end of the city of Tunis, without fear of being insulted by the Turks, as one is sure to be at Algiers. The taverns kept by the slaves are better regulated, and those slaves are allowed to chastise even a Turk, if he drinks too much, or behaves insolently; and even to pull off and keep his turban, till he has paid his reckoning. They sell none but white wine, which the country produces in great plenty, and is very cheap and good. It is customary in the taverns at Tunis, when a person calls for a quart of wine, to set before him three or four dishes of meat or fish, with fallad and other sauce; and, when he goes away, he pays only for the wine at a common price. Some of the graver people, who have no constant employment, spend the day, either in conversing with one another in the barbers shops, in the bazar, or at the coffee-house; but many of the Turkish and Moorish youths attend their concubines, with wine and music, into the fields, or make merry at one of the public taverns.

As to the Arabs of Tunis, their lives are one continued round of idleness or diversion; for, when they are not called abroad by any pastime, they spend the day in loitering at home, smoking their pipes, and reposing themselves under some neighbouring shade: yet the Arab places his highest satisfaction in his horse, and is seldom in high spirits, but when hunting or riding at full speed. Hawking is another of their principal diversions: and those who take delight in fowling, instead of springing the game with dogs, shade themselves with a piece of canvas stretched upon two reeds, and painted with the figure of a leopard. The fowler thus concealed walks through the breaks and avenues, looking through some holes a little below
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the top of the skreen to observe what passes before him. On the approach of the canvas, the partridges and some other birds are observed to covey together, though they were before at some distance from each other; and the woodcock, quail, and some other birds that usually feed in flocks, will, on seeing it, stand still, with a look of astonishment. By this means the sportsman has an opportunity of coming near them, when resting the skreen upon the ground, and directing the muzzle of his piece through one of the holes, he shoots at a whole covey at once.

THE Bedoweens, a name given to the Arabs who live in tents, still retain many of the customs we read of in sacred and profane history; for, excepting only their religion, they are the same people they were several thousand years ago. Upon meeting each other, they still use the primitive salutation, "Peace be with thee." The inferiors shew their respect to their superiors by kissing their feet, knees, or the borders of their garments. In saluting each other, they clap their right hand on their breast; and at their great solemnities, the wife compliments her husband by kissing his hand. Persons of the highest character, like the ancient patriarchs, and the heroes of antiquity, perform what we term menial offices. The greatest prince, when visited by a stranger, is not ashamed, says Dr. Shaw, to fetch a lamb from his flock and kill it, while the princess makes haste to prepare her fire and kettle, and then dresses it. The custom of walking either bare-foot, or with sandals, renders the compliment of washing the stranger's feet, still necessary: this is done by the master of the family, who first presents himself, and is always the most officious in this act of kindness. When his entertainment is ready, he would think it a shame

shame to sit down with his guests, instead of which he stands all the time, and waits upon them: yet notwithstanding this respect, there have been instances, in which those have been the next day overtaken and robbed, by the very persons who entertained them with such hospitality the night before.

WHILE the lazy husbands take their repose under some neighbouring shade, and the young men and maidens attend the flocks, the wives are all day employed at grinding at the mill, dressing provisions, or working at the looms; and to conclude the day, they still, as in ancient times, take a pitcher or goats-skin, and tying their sucking children to their backs, trudge two or three miles to fetch water. Yet notwithstanding all this business, they will not lay aside any of their ornaments, neither their nose jewels, their bracelets for their arms and legs, or their ear-rings; all of which are very cumbersome; nor will they omit tinging their eyes with lead-ore; so prevalent is custom, and so fond are even the ladies in Barbary of appearing in the fashion.

ARTS, MANUFACTURES, &c.

AS to the liberal arts and sciences, they have been for many ages, and still continue to be, (says Dr. Shaw) in a low condition amongst the Mahometans; and no wonder this is the case more especially in Barbary, since the roving life of the Arabs, and the perpetual grievances the Moors meet with from the Turks, will not permit either of them to enjoy that liberty, quiet, and security, which have at all times given birth and encouragement to learning. As for the Turks, they are generally of such turbulent and restless dispositions,
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or so deeply engaged in trade and the improvement of their fortunes, that they have no taste at all for learning, being astonished, as they often told our author, how the Christians can take delight, or spend so much time and money in the empty amusement of study and speculation.

MOROCCO leather, the preparation whereof we have heretofore described, is one of the most curious manufactures of Barbary. Carpets are another branch of the trade and manufactures of that country. They are made indeed of coarser materials, and are not so beautifully designed as those of Turkey; but, being cheaper and softer, they are preferred to lie upon by most sorts of people. At Algiers and Tunis they weave velvets, taffaties, and several kinds of silks; and all over these kingdoms they make a coarse sort of linen, but Susa is noted for producing the finest. These manufactures however, both of silks and linens, are so inconsiderable, that they scarce make enough for their home consumption, the deficiency being frequently made up from the Levant and Europe.

THE chief manufacture among the Arabs, Dr. Shaw informs us, is the making hykes, (as they call woollen blankets) and webs of goats-hair for their tents. This work is done only by the women, who make no use of a shuttle, but conduct every thread of the woof with their fingers. One of these hykes is usually six yards long, and five or six feet broad, serving the Arab for a compleat dress in the day, and for his bed and covering in the night. They join together the two upper corners with thread or a wooden bodkin, and, these being first placed over one of their shoulders, they afterwards fold the rest of it round their bodies; but it is a troublesome kind of garment, being frequently disconcerted and falling upon the ground,

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so that the person who wears it is often obliged to tuck it up and fold it anew.

IN most of the towns and villages there are looms for weaving the hyke, and also the burnoose, as they call their cloak or upper garment. This garment is of one piece, made narrow about the neck, with a cape to cover the head, and wide below like a cloak. The cape, however, is only occasionally made use of during a shower of rain, or in very cold weather. Some of these garments are fringed round the bottom*.

THE girdles of the Arabs are usually of worsted, very artfully woven into a variety of figures, and made to wrap several times about their bodies. One end of them, being doubled and sown along the edges, serves them for a purse; and they make a farther use of them, by fixing in them their knives, poniards, and inkhorns. — The Moors and Turks in general, with some of the richer clans of the Arabs, wear, upon the crown of their heads, a small hemispherical cap of scarlet cloth, which Dr. Shaw takes notice of as another chief branch of their woollen manufacture. The turban, which is a long narrow web of linen, silk, or muslin, is folded round the bottom of these caps, and distinguishes, according to the order and fashion of the folds, the several orders of soldiers not only from the tradesmen and citizens, but from one another.

* Dr. Shaw thinks the burnoose is probably the same with our Saviour's cloak, which (John xix. 23.) was wove without seam from top to bottom; and with the cloaths of the Israelites (Exod. xii. 34.) wherein they folded up their kneading troughs, &c. as the Moors and Arabs do, to this day, things of like burden and incumbrance.

THE greatest part of the manufactures above-mentioned are consumed at home; and it may be farther observed, that the inhabitants of Barbary send few of their commodities to foreign markets. Oil, hides, wax, pulse, corn, says Dr. Shaw are the general produce of the kingdoms of Algiers and Tunis; but the first are either in such small quantities, or so much wanted at home, that corn may be reckoned the chief or only commodity for exportation. Formerly indeed, seven or eight thousand tons of oil have some years been shipped off by our merchants from those kingdoms; but there is so great a consumption of oil among the natives themselves, that the Algerines will seldom permit it to be exported into Christendom. Greater quantities are produced near Tunis and Sufa; but then the Moorish merchants alone are allowed to buy it, obliging themselves at the same time to dispose of it at Alexandria, Damietta, or some other ports of the Ottoman dominions.

IT being now time to leave Barbary, we shall conclude this chapter with an observation which Dr. Shaw mentions to the honour of the western Moors, namely, that they continue to carry on a trade with some barbarous nations bordering on the river Niger, without seeing the persons they trade with, and without having once broke through that original charter of commerce, which from time immemorial has been settled between them. The method is this: At a certain time of the year a numerous caravan sets out on this journey, carrying along with them strings of coral and glass beads, bracelets of horn, knives, scissars, and such-like trinkets. When they arrive at the place appointed, they find, in the evening, several heaps of gold-dust, lying at a small distance from each other, against which the Moors place so many trinkets.

trinkets as they judge will be taken for the value. If the Nigritians, the next morning, approve of the bargain, they take away the trinkets and leave the gold, or else make some deductions from the heaps; and thus they transact their business without the least instance of dishonesty or perfidiousness.

C H A P. III.

OF NIGRITIA OR NEGROLAND AND GUINEA.

WE are much in the dark concerning the country of Nigritia, and all the other inland parts of Africa; for most of the knowledge we have is gathered from the reports of the natives, who are but poorly qualified for descriptions, and know little of the natural history and curiosities of the countries they inhabit. In that vast tract which our geographers have assigned to Nigritia or Negroland, which is supposed to derive it's name from the great river Niger, running through it from east to west, there are many kingdoms and nations of different people, who are subject to absolute princes. The country, particularly near the river, is extremely fertile, and abounds with the most delicious fruits, but the heat of the sun, before any breeze arises, is intolerable: yet as a refreshing gale always springs up about noon, it renders the country very supportable. However, constant thunder and rain, with a close suffocating heat prevail during four months in the year. The tornadoes sometimes produce a most dreadful and astonishing scene; the most horrible darkness

darkness comes on at mid-day, and the thunder and lightning is more dreadful than can be imagined; for the whole face of nature seems suddenly changed. Yet, whatever amazement and terror this may impress upon the minds of strangers, it is seldom attended with fatal consequences, and the power of custom renders it but little regarded by the natives.

As all Nigritia and Guinea lie within the tropic of Cancer, the air, as has been already intimated, is excessive hot, and, the flat country being overflowed a great part of the year by the periodical rains, this contributes to render it very unhealthful; but to these may be added several other causes, as the coolness of the night, suddenly succeeding the heat of the day, whereby contrary effects are produced in the body, especially in those who are not accustomed to bear more heat than cold, by hastily throwing off their cloaths, and cooling too fast. A second cause is, that this country, particularly the gold coast, abounds with high mountains, and in the vallies between them there arises every morning a thick stinking sulphureous damp, or mist, which spreads itself in such a manner, that it is almost impossible for Europeans to escape the infection, while they are fasting, their bodies being more susceptible of it than the natives. The great difference between the European air and this, is so observable, that till lately few came hither that were not seized with a raging fever, and the ships frequently lost half their crews by fevers; but, since Dr. James's powders have been carried thither, they have happily produced the most astonishing and salutary effects, and, by this means alone, this voyage, which has been justly dreaded, is rendered as safe to the English, as those to any other hot countries whatsoever.

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It is observable that the winds on the coast of Guinea are directly contrary to the trade winds, and blow from west to east; except in the rainy season between the vernal and autumnal equinox, when the violent hurricanes just mentioned, attended with thunder and lightning, proceed from the south, from whence the storms blow with great violence; on which account the ships on the coast are in danger of being wrecked on the shore, on which a surf constantly beats in the calmest weather, that renders landing, not only very difficult, but dangerous. However, the air is for the most part pleasant and refreshing; but has something so peculiar in it, that keys will rust in a man's pocket. One of the greatest advantages of these countries, is their enjoying, in a manner, a perpetual spring, ripe fruit and blossoms being commonly seen on the same tree.

F O S S I L S.

BOTH Negroland and Guinea have mines of iron, copper, silver, and gold, though we are not certain whether many of them are wrought. Mr. Moore tells us, that the gold which the merchants bring down to the European traders on the river Gambia is of a very good quality, and finer than the sterling gold. They bring it in small bars, thick in the middle, and turned round into rings, from ten to forty shillings value. These merchants are blacks of the Munding race, and are called Joncoes. They are very unwilling to say much of the inland countries; and all our author could gather concerning the gold was, that it is not washed out of the sand, but dug out of mines in the mountains, the nearest of them at least twenty days journey from Cower. In the country

country where the mines are, they say there are houses built with stone and covered with terrace, and that the short cutlasses and knives which they bring down with them are made there, the steel whereof is excellent.

As to Guinea, it is supposed to contain more gold than any other part of the world, there being great quantities of it washed down from the mountains, and found in the rivers. By violent rains and torrents pieces of rocks are sometimes removed, and bits of this precious metal picked out of the clefts and cavities where it lay concealed; but much more is washed down in little particles, no bigger than sand, into the rivers, which is called gold-dust, as the former is called rock-gold. The European merchants and factors never go up into the country to purchase gold, but the trading negroes bring it to the forts and factories, and on board the European ships, great part of it coming two or three hundred miles or upwards. It is said the negro merchants mix copper, and other ingredients of less value, both with the rock-gold and gold-dust, in which cheat they are exquisite proficient. The value of the gold brought from the Guinea coast, one year with another, by all the European nations that trade thither, is supposed to amount to three hundred thousand pounds sterling, or upwards; of which the English may import one third, the Dutch another, and the French, Danes, Portuguese, and Prussians the remainder.

IN the rainy seasons, after a wet night, the sea-shore is covered with people, mostly women, each having a couple of bowls made of calabashes, the largest of which they fill with such earth and sand as the floods have brought down from the mountains; and this they wash with many waters, often
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turning the bowl round, till the earth and sand be all washed away, except two or three spoonfuls at the bottom, which they carefully put into the other bowl; for the gold, if there be any, sinks to the bottom by reason of it's weight. Thus they continue washing the sand till the small bowl is pretty well filled with the sediment, which they carry home, and search diligently. Sometimes they find as much gold as is worth a shilling, sometimes ten, and very often none at all.

ON the south side of the Gambia, not far from the sea-coast, there is a negro nation which F. Labat calls Balantes, in whose country the Portuguese imagined there were mines of gold, because having bought some fowls of the Balantes, they found grains of gold in most of their gizzards. This induced the Portuguese to attempt the conquest of that country, and accordingly, in July 1695, they landed there without opposition; but it being then the rainy season, they had such violent showers that all their arms and ammunition were spoiled, and the Balantes attacked them so briskly with their hassagayes and sabres, that they were intirely routed, and obliged to retire, leaving behind them a great number of their allied negroes, with the best part of their baggage, arms, and ammunition.

THE same father informs us, that in the country of the Saracoles there are several naked hills of a beautiful marble of different colours, but chiefly red, from whence it would be no difficult matter to bring it to Europe. He also mentions another mountain of red marble mixed with white veins, which are so bright and shining that they appear like silver. This marble is so hard, that it is used instead of flints by the natives.

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THE natural salt, formed at the bottom of certain pools near the sea, is a curiosity mentioned by the same author. He reckons eight of these pools, wherein the salt is naturally formed at the bottom of the water, like a scaly stone; which being broke with long iron crows, the salt rises up to the surface, and the natives skim it off, and dry it in the air. Whatever quantity they take, it does not appear to diminish in the least; but the salt is not wholesome, being corrosive, and is only used to cure raw hides.

VEGETABLES.

THE Pholeys, a people who apply themselves most to husbandry, plant tobacco and cotton near their towns, which they fence in together. Beyond this inclosure are their corn-fields, of which they raise the four kinds usual all over the countries bordering on the Gambia; that is to say, Indian corn, or maize, which is also the food of the natives of America, where we shall speak of it more particularly: Besides which they have rice, and the larger and lesser Guinea corn. They have no wheat, barley, rye, oats, or any other European grain; but they have a kind of pulse between the kidney-bean and the pea, and yams and potatoes. The Indian corn they set in holes, three or four together, about four feet distant from each other, so that it grows like hops. It shoots up to the height of eight or ten feet, being a large cane, with the ears growing out of the sides. The rice, which they esteem their choicest food, they set in rills, as we do pease; it requires wet grounds, and its ears are like those of oats. The larger Guinea corn is round, about the size of our smallest pease. This they sow by hand, as
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we do wheat and barley; and it runs up to nine or ten feet high, though a small reed, the grain growing in a large tuft at the top. The lesser Guinea corn is sown in the same manner, and shoots to the same height; but the reed is larger, on the top of which the corn grows in a head like a bulrush. These are all of the bread-kind that are cultivated on the river Gambia; and, indeed, the natives make no bread, except the women who are accustomed to Europeans, but use the flour of the several grains to thicken their liquids. The Indian corn they use mostly green, parching it in the ear upon coals, which gives it a taste like green pease. They chiefly boil their rice as the Turks do; and make flour of their corn by pounding it in wooden mortars.

THE palm-tree in Negroland (perhaps a different species from any we have yet mentioned) Mr. Moore describes to be a fine straight tree, growing to a prodigious height, some of them to sixty, seventy, or a hundred feet. From this tree the natives extract a sort of whitish liquor like whey, called palm-wine, by making an incision at the top of the trunk, to which they apply a pipe made of leaves, through which the liquor runs into gourd-bottles. This wine, says our author, is pleasant to drink as soon as drawn, being exceeding sweet, but apt to purge very much. In a day or two it ferments, and grows hard and strong, like Rhenish wine; at which time the natives drink it in abundance, it being then no ways unwholesome.—To see how nimbly the negroes climb up these trees is very surprising, having nothing to assist them but a piece of bark made round like a hoop, with which they inclose themselves and the tree, and so setting their feet against the tree, and their backs against the hoop, they ascend

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very swiftly ; but sometimes they fall down and lose their lives, either by missing their footing, or the breaking of the hoop.

WHAT they call the ciboa-tree seems to be another species of the palm, growing, like that, to a great height, and yielding a wine in the same manner, but not quite so sweet as the former. The trunk of this tree, as well as the palm, is very sappy when young, but very tough when old ; and the leaves that grow on the top are of great service in covering of houses.

THERE is also a species of palm growing in those parts of Africa we are speaking of, which yields an oil called palm-oil, or oil of Senegal, the name of a large river supposed to be a branch of the Niger or Gambia. This oil, or rather ointment, which is of an orange colour and fragrant smell, is obtained from the pulp of the fruit by adding to it a large quantity of boiling water, and stirring them in a kettle over the fire till they are intimately mixed. Then taking the kettle off the fire, they let the matter stand till it's more solid parts subside to the bottom ; and, having skimmed off the oil that floats on the surface, they repeat the operation by pouring on it more boiling water. The oil is of the consistence of butter, and used as such by the Africans, who also burn it when old. In Europe it is esteemed a good remedy against cold humours, and is said to strengthen the nerves, give ease in pains of the gout, remove weariness, and relax contracted parts.

MR. STIBBS gives us a description of a tree called pau de sangue, or blood-wood, from a reddish gum which it yields. This tree, according to Mr. Stibbs, grows plentifully all up the river Gambia, and is a hard wood, of a beautiful grain, and polishes finely, so that it is very proper for
escrutores

escrutores or inlaying. It does not grow to any great height or bulk, so that it is not easy to find one that will produce a plank fourteen, fifteen, or sixteen inches broad. It grows generally in a dry rocky soil, on the sides and tops of hills; and, when the wood is first cut, it has an agreeable smell. Upon wounding this tree, the juice sweats out in drops like blood, which joining together, and being dried by the sun, congeal into lumps. Mr. Moore has had some as large as pullets eggs; but he gives no account of the trees growing so plentifully near the river as Mr. Stibbs represents. They seems rather, according to Mr. Moore, to be found in great abundance about four days journey from Fatatenda, one of the company's factories on the Gambia, about five hundred miles from the mouth of the river.

THE principal commodity on the banks of the river Senegal is gum Senegal, which is used both in medicine, and in many arts and manufactures, particularly by the silk-weavers, dyers, and painters in water-colours. The tree from which it is produced, is described by Lebat as a species of acacia, it being small, prickly, full of branches, and covered with very narrow leaves, moderately long, and of a perpetual verdure. According to some authors, it bears a white flower composed of five leaves, which form a kind of a cup; but other naturalists represent it, as formed of one leaf, in the manner of a funnel, and the flowers are in clusters; from the bottom of the flower rises the pistil, and the flower is succeeded by a pod, three or four inches long, filled with small, round, hard and black grains, which serve to propagate the species. Of this kind of gum-tree, there are three forests, all in the desert north of the river, and nearly at equal distances from it. Every year

produces two crops, if it may be thus termed, of gum; the first and best in December, and the other in March. The first tears or exudations are the largest, the driest, and most pure, with every other advantage required in this drug; and the other more soft, glutinous, and impure. The December crop is gathered after the rains have ceased, and the moisture of the earth has rendered the sap more abundant; but that in March is procured by making incisions in the trees, which have then too little vigour to produce it of themselves. The natives who feed upon this gum after it is dissolved in milk, sell it by a cubic measure called a quintal, which holds about two hundred weight; and this they exchange for goods of about two shillings value. The white and smaller tears of this gum are often sold for the true gum arabic, and indeed their properties and qualities are much the same.

THE banana-tree grows plentifully near the river we have so often mentioned, bearing a fruit six or seven inches long, covered, when ripe, with a yellow and tender skin. Its leaves are two yards long, and about twelve inches wide; and the fruit grows upon a stalk about six yards high, each stalk bearing only one single cluster or bunch, which perhaps consists of forty or fifty bananas. When the bunch is gathered they cut off the stalk, otherwise it would bear no more fruit. The pulp of the fruit is as soft as marmalade, and of a very pleasant taste; and it is said to be very nourishing, to excite urine, and provoke to venery.—The fruit of the plantain-tree is not much unlike the banana either in taste or shape, only it is somewhat longer.

HERE are also guavas, which resemble peaches, only the outside is much rougher, and there is no stone within, but kernels less than those of apples. This

This fruit is reckoned an excellent medicine against the flux.—Physical nuts, and tabacombas, are likewise found about the Gambia, the former of which contain three or four small kernels, whereof one or two are a purging-dose; but they are apt to vomit as well as purge, though they are frequently used by the natives.—The tabacomba is almost like a bon-chrétien pear, with a rind resembling that of a pomegranate. When it is ripe it opens of itself, the pulp appearing of a reddish colour, with large stones, and very insipid.

WE shall next mention Guinea pepper, from whence part of that country, where it grows plentifully, is called the grain coast. Abundance of it grows likewise in America, where it is much esteemed; and it is now cultivated pretty commonly in France, especially in Languedoc. The shrub that bears it flowers in our gardens in August, and produces red pods about the latter end of September and October, in which the pepper is inclosed; but the plant perishes with the first frost, so that it is sown annually. The skins boiled, and used as a gargle, assuage the tooth-ach; and a catalapsm made of the seeds mixed with honey, and applied to the throat, is good for a quinsy; otherwise it is not much used in medicine.

MR. FINCH mentions a tree that is extremely poisonous. It resembles a beach, and is called by the natives agon. It's fruit is of an oblong form, like the pod of a bean; and is distinguished by it's size into three kinds, all of which have the most malignant qualities. Within the pod are inclosed four or five square beans, each incircled with a hard rind, within which is a yellow kernel, from whence the poison is extracted. These are used by the natives in poisoning their

arrows, and nothing can more effectually answer that purpose, as the smallest quantity, entering the body by the skin, proves fatal.

A N I M A L S.

THE parts of Africa we are now treating of abound with elephants, lions, and other wild beasts already described. Mr. Stibbs tells us, that one morning, as he was examining a hill that lies near the Gambia, up which river he was sent to make discoveries, he found near the top a lion's den, and soon after heard the lion roaring at no great distance, which occasioned him to make haste to the bottom of the mountain. The den, he says, was cunningly chosen in a solitary place, about three quarters up the hill, at the foot of a precipice in the side of a rock. It was difficult of access, but large and commodious, yet undoubtedly formed by nature. The track to it, with the footsteps, excrements, and even some of it's hair, left him no room to doubt but that it was the residence of a lion, which are plentiful up the river. Their roaring, adds our author, we frequently heard in the night, but he could not say that ever he had seen one in the woods. However, he had once the sight of two or three hundred elephants in a drove, coming down to the river to drink, which raised the dust like the smoke of a glass house or brew-house fire; and another time he saw a great number of those animals swim across the river not above a quarter of a mile ahead of his vessel.

ALONG the gold coast are an incredible number of harts, and about twenty different sorts of deer, some as large as small cows, and others no bigger than cats; most of them are red with a black list upon

upon the back; and some of them red, beautifully streaked with white. All of them are esteemed delicate food, particularly a sort about two feet long, the flesh of which is much admired. Among these animals is one of a red colour, of extraordinary beauty: these have little black horns, and are so small, that the legs of some of them, according to Mr. Boseman, are no thicker than the small part of a tobacco-pipe. They seem to be the same with the beautiful antelopes mentioned by Mr. Smith in his voyage to this country. These pretty creatures, says he, seemed rather to vanish, than to run by us, among the bushes; yet they are often caught and shot by the natives. They are no bigger than rabbits, and the Europeans frequently tip their feet with gold, to make tobacco stoppers of them, but they are so very tender that it is impossible to bring them alive to Europe.

As for the river-horse, crocodile, and alligator, which are all frequent in the Gambia, we refer the reader to the description we have already given of those animals*: But it seems proper to add here, that there is also plenty of guanas, a creature resembling a little alligator. The natives say, that, when a man comes near them unawares, they will sometimes break his legs with their tail; which one would almost think impossible, says Mr. Moore, the whole animal being seldom above a yard long. The negroes, and some white men, eat the guana as a great dainty; and our author was told it tastes as well as any rabbit.—Of this creature we may perhaps find occasion to say something more when we come to America.

See Vol. IV. p. 237.

IN these parts of Africa, as in most hot sandy countries, there are a great many snakes and other venomous reptiles. Mr. Moore tells us that the natives are much afraid of the black snakes, which he himself has seen three yards long, and as big as the small of his leg. He was also told of several other venomous snakes, particularly some with a comb upon their heads, which they positively affirm to crow like a cock. This perhaps is what we call the basilisk or cockatrice, concerning which many strange things have been reported, that are now generally looked upon as fabulous. He shot a green snake about two yards long, but in the thickest part not above three inches in circumference. This kind of snake, he was informed by the natives, is not at all venomous; but they have so many that are so, that they seldom go without a remedy about them, in case they should be bit by any of these poisonous animals.

THERE are great numbers and a prodigious variety of snakes in that part of Guinea called the gold coast, some of which are of an amazing size. Mr. Boseman observes, that the largest of those taken, while he was on this coast, was twenty feet long; he tells us, that he believes they are still larger within land, and that there have been frequently found, in their entrails, not only harts, and other beasts, but also men. Most of the snakes are venomous, but one is so to an extraordinary degree. It is said that, though this is scarce a yard long, it is two spans thick, and variegated with white, black, and yellow.

IN some places there are said to be toads as large as a pewter plate; these are mortal enemies to the snakes, with which they have frequent engagements. There are likewise many centipedes, whose

whose bite occasions a violent pain for several hours, but is not mortal. Spiders of a monstrous size are also found here, and are said to be venomous.

AT a town about a mile from Brucoe Mr. Moore found a very large scorpion, being full twelve inches long. These creatures are reckoned very venomous; and were a person to be stung by so large a one as this, our author believes it would be immediate death. He has known several people stung by small scorpions, which wound is so extremely painful, that for at least twelve hours the person stung cannot sleep; but about that time the pain abates, and soon after is quite over. It is remarkable, that notwithstanding the violence of the pain, the swelling is very little.

GUINEA hens and partridges are to be met with in vast numbers in these countries; and it is worth observing, as Mr. Moore says, that the latter have sometimes two large spurs on each leg; and this he had reason to remark, having his hand one day torn with the spurs, as he snatched up a bird he had just shot, fearing lest it should escape.

THERE are likewise a variety of large and small birds, some of which are extremely beautiful, their plumage being finely variegated with the brightest colours; and the heads of some of them, crowned with tufts of feathers. Particularly there are two sorts of crowned birds on the gold coast; one is about three feet high, shaped like a heron, and feeds on fish. It is black and white, and crowned with a bunch of feathers, that resembles the tassel of a coach-horse. The other is about the size of a parrot, and is green about the head and neck; the body is of a fine purple, and the wings and tail are scarlet, tipped with black.

AMONG the birds of Whidah, is one remarkable for changing it's colour whenever it moults; so

that those which are black this year, will be blue or red the next; the following year they will be yellow, and afterwards green; but they never vary from these five colours, which are always very bright, and never mixed.

THERE are a sort of screech-owls, which in the night-time make a very dismal noise, and are taken by the natives for witches. If one of these birds happens to come into a town in the night, the people are presently all alarmed and fire at it as an enemy; and as they never had the good fortune to kill one of them, that Mr. Moore could learn, they still continue to be witches in the opinion of the poor natives.

SEVERAL remarkable insects are found near the river Gambia, and other parts of Negroland and Guinea. Mr. Moore tells us, that during the time of a very dreadful tornado a sort of large flies with long wings came on board a sloop in the river in such prodigious numbers, that flying into the flame of the candles, the table was soon covered with those that had burnt their wings; and others, which were not burnt, shed their wings as they walked along the table, and then were nothing but so many large maggots. The draughts of some of these African insects shew them to be curiosities in nature.

THE musquetoës, says our author, are the greatest plague to a person of any vermin on the river. They are even worse than some small flies, from their minuteness called sand-flies, which are so little as hardly to be discerned. These, if any wind be stirring, are not able to bite; but the musquetoës mind neither wind nor any thing else, giving a person continual disturbance, especially in the night-time. They may be compared to our English

English gnats, but are much more troublesome; when they bite, the part itches very much, and if you scratch it till it bleeds, you run the risque of having a sore; and when it is healed, the place always appears of a blackish colour.

THE buggabuggs, as the natives call them, are a pernicious and destructive vermin wherever they get an entrance. Their way of travelling is to make a hollow pipe or tube of dirt, much like an arch of a vault, under which they march without being seen. They are a sort of white ants, and are very expeditious at their work, for in twelve hours they will make their tube, and travel eight or nine yards to get to a chest, box, or barrel. Wherever they get, they make strange havock, especially in woollen cloaths. In short, nothing comes amiss to them, for they feed as heartily upon wood as any thing else; and what is most remarkable (says our author) is, that they eat the inside only of a chest or table, so that when they have entirely destroyed it by eating the very heart and substance of the wood, it appears to the eye to be still sound. They cannot bear the sun, which seems to kill them for a time; but after sun-set they are observed to recover their strength and vigour. People are obliged to watch these creatures very carefully, and to take measures to prevent their coming to their chests, which is done by putting them on stands with the legs of them well daubed with tar; and if the tar be not spread over anew at least once a week, it is ten to one but these insects pay them a visit.

IN the rainy season, says Mr. Moore, the frogs, of which there are vast numbers, and much larger than those in England, make as much noise in the night as a pack of hounds, and not unlike it at a considerable

considerable distance. This music, together with that of the screech-owls, and the wild beasts in the woods and mountains, must needs be very disagreeable.

AMONG the fish formed on the gold coast, is the sea-devil, and the horned fish; the former is about twenty-five feet long, and proportionably thick; but what is most remarkable are the angles which project from it's body, and are of a hard, horny substance. The head, which is large, is joined immediately to the body, without the smallest appearance of a neck, and is furnished with flat teeth. Nature has bestowed on this animal four eyes, two of which are near the gills, and are large and round, but the two others on the forehead are of a smaller size. On each side the gullet are three horns, of an equal length and thickness; that on the right side, which stands between the other two, is about three feet in length, and an inch and a half in circumference, at it's insertion, gradually terminating in a sharp point; but as it is yielding and flexible, it affords the animal only a feeble protection. The tail, which is long and taper, like a whip, is armed with a sharp point, which he frequently darts backward, and his back is covered with hard excrescences, two inches high. The flesh is tough and ill tasted, though much sought after by the negroes.

THE horned fish, or sea bull, is about three feet long, exclusive of the tail, and armed with two horns in it's forehead, which are bony, strong, rough, pointed at the extremity, and about six inches in length. His eyes, which are large, are fringed with a kind of strong hard hair; and the head has some resemblance to that of a hog; but terminates in a kind of proboscis, which is the only passage, by which it receives it's food, consisting
of

of small fish and sea weeds. His body is square, of an equal thickness at both extremities, it being every-where about five feet in circumference. His skin is rough, strong, and filled with pointed knobs, but is not prickly, or covered with shells, and is every-where spotted with different colours, as white, grey, and violet. On his back rise two excrescences, about three inches high, which run from the base of the horns, almost to the tail: this is composed of two parts; the one fleshy, and covered with a continuation of the skin of the body, it being in fact a part of the vertebræ of the back, but more flatted and pliant. The other is a thick fin, of a brown colour, streaked with parallel lines of white, and serves both for a kind of rudder, and for it's defence.

THERE is one curiosity which we shall take the liberty to mention under this article, though perhaps some people may think it not worth notice. Mr. Moore thought it remarkable, and accordingly tells us, that one evening he supped upon oysters which grew upon trees; and this he makes appear to be literally true. On the banks of the river, it seems, where the water is salt, and near the sea, grow certain trees called mangroves whose leaves being long and heavy, weigh down the boughs into the water. To these leaves and branches the young oysters fasten in great quantities, where they grow till they are very large, and then they cannot be separated from the tree, but people cut off the boughs, on which the oysters hang somewhat resembling a rope of onions.

BUT of all the productions of these parts of Africa, perhaps none more deserves the attention of the curious than that we are now going to describe. Some of the natives having got a net, Mr. Moore went along with them to fish in a lake over-against one of the factories, where they caught
a great

a great number of fish, and amongst the rest one something like a gudgeon, but much larger. None of them cared to touch it, and persuaded our author not to come near it, telling him it would kill him. Some of them got long sticks, and touched the fish with them; but, finding the effect not so bad as they apprehended, they cut the sticks shorter and shorter, and even at six inches length the fish had no effect. At last they ventured to touch it with their fingers, but could not bear it the twentieth part of a minute. By this time Mr. Moore understood it was a torpedo, or numb-fish, and had the curiosity to touch it with one of his fingers; but in a moment his arm was dead quite up to his elbow, which came to itself again as soon as he withdrew his hand from the fish. He repeated the experiment several times, and found it have the same effect, even after the fish was dead. He then ordered the fish to be skinned, and found that the benumbing quality lay in the skin only, which it intirely lost when dried.

THIS is the plain matter of fact, as Mr. Moore has related it; but as it is one of the most curious subjects in all Natural History, we think it will not be disagreeable to inquire into the cause of such a wonderful effect. But let us first observe, that, whereas Mr. Moore represents the torpedo to be like a gudgeon, other authors speak of it as a flat fish, much of the figure of a thornback*, found

* It seems as if different sorts of fishes were endued with a benumbing quality, there being no manner of likeness between the shape of a gudgeon and a thornback; and M. du Hamel, in his history of the Academy of Sciences, mentions a kind of torpedo which he compares to a conger-eel, a shape quite different from either of the former. M. Richer, from whom he has the account, affirms on his own knowledge, that they numb the arm strongly when touched with a stick, and even sometimes occasion a vertigo.

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commonly enough about the coasts of Provence, Gascony, &c. and eaten by the people of those countries. And whether the surprizing quality of the fish lies in its skin, as our author supposes, let the reader judge, after he has considered the following hypotheses.

THERE are different ways of accounting for the effect produced by touching the torpedo. The first is that of the ancients, who contented themselves with ascribing a torporific virtue or faculty to the animal, which is just the same as saying nothing at all. The second supposes the effect to depend on an infinite number of corpuscles issuing continually from the fish, but more copiously under some circumstances than others. This is the opinion most generally received, being adopted by Redi, Perrault, and Lorenzini, who thus explain themselves: As the fire emits a quantity of corpuscles proper to heat us, so the torpedo emits a number of corpuscles fit to numb the part they insinuate themselves into, whether it be by entering in too great abundance, or by their falling into tracts or passages disproportionate to their figures. The third account is that of Borelli, who looks upon this emission of corpuscles as imaginary, and says, that the fish, upon being touched, puts itself into a violent tremor or agitation, which occasions a painful numbness in the hand that touches it: but M. Reaumur, whose hypothesis is the last and justest, could never observe any such trembling, notwithstanding he viewed the fish with great attention when ready to strike the numbness.

THIS gentleman observes, that the torpedo, like other flat fishes, is not absolutely flat, but it's back, or rather all the upper part of it's body, a little convex. Now M. Reaumur always found, that when the fish did not, or would not, produce any numbness in the person who touched it,

it, its back preserved its natural convexity; but whenever it would dispose itself to resent a touch or thrust, it gradually diminished the convexity of its back parts, rendering them quite flat, and sometimes even concave. The very moment after this disposition, the numbness seizes the arm, the fingers that touched are obliged to withdraw, and all the flat and concave part of the body is again seen convex: and whereas it becomes flat so gradually as to be perceived, the return to its convexity is so swift, that it is absolutely imperceptible. It is from this sudden stroke, according to M. Reaumur, that the numbness of the arm arises, for the person, when he begins to feel it, imagines that his fingers have been violently struck. The wonder is, how so soft a substance, as that of the fish, can give so rude a blow; and indeed a single stroke of a soft body could never do it, but in this case there is an infinity of such strokes given in an instant. To understand this, we must consider the mechanism of the parts whereon it depends, which are two very singular muscles, described by several authors. They are shaped like a half-moon, and both together take up almost half the back of the fish, the one on the right side, the other on the left. Their origin is a little above the mouth, and they are separated from each other by the Bronchia, into the last of which they are inserted. But what is singular in them is their fibres, if we may give that name to a sort of smaller muscles as big as goose-quills, of an assemblage whereof the two great muscles are formed. These lesser muscles are hollow cylinders, their length nearly equal to the thickness of the fish, and ranged perpendicular to its upper and lower surfaces, accounting those surfaces as nearly parallel planes. These

These again are composed of twenty-five or thirty smaller cylinders placed over each other, and each full of a medullary substance.

Now we need only remember, that, when the torpedo is ready to strike its numbness, it slowly flattens the surface of its upper part; and the whole mechanism, whereon its force depends, will be apparent. By that gradual contraction it bends, as it were, all its springs, renders its cylinders shorter, and at the same time augments their bases; and, in all probability too, the large fibres, or little muscles, at that instant lose their cylindrical form, to fill the vacuities between them. The contraction being made, the longitudinal fibres are lengthened, the transverse ones are shortened, and the soft matter they inclose is driven upwards, which is promoted by an undulatory motion, apparent in the fibres when contracting. The parts of the torpedo being thus disposed, a finger that touches it instantly receives a stroke, or rather several successive strokes, from each of the cylinders to which it is applied. As the soft matter is distributed into divers inclosures, it is more than probable that all the strokes are not given precisely at the same moment; nor indeed would they be so if there were no inclosures at all, but they serve however to augment the number of the springs, and consequently the velocity and force of the action. These quick reiterated strokes shake the nerves, and suspend or change the course of the animal spirits; or they produce a motion in the fibres of the nerves, which clashes or disagrees with that they should have in order to move the arm, and occasions a painful sensation. Hence it is, that the torpedo does not convey its numbness to any considerable degree, except when touched on

on these great muscles * ; so that the fish may be safely taken by the tail, which is the part by which the fishermen catch it.

As the torpedo lives on other fishes, it is probable, that its benumbing faculty is of use to it in catching them ; and this is the opinion of Pliny, Aristotle, and many other naturalists. M. Reaumur had no fish alive, to try whether the torpedo would kill them ; but, having shut up a drake in water with the fish for some time, the drake was taken out dead, doubtless from its too frequent contacts with the torpedo. But, what is still more strange than the torpedo's killing of fishes, the History of Abyssinia speaks of its bringing dead ones to life again, they being seen to stir if put together in the same vessel. What is related in the same history is much more credible, viz. that the

* Those authors who have accounted for the effect of the torpedo from torporific effluvia, have been obliged to have recourse to the same two muscles ; but then they only make them reservoirs of the corpuscles, whereby the numbness is effected. Lorenzini, who observed the contraction of the Torpedo as well as Reaumur, pretends that all the use of it is to squeeze those corpuscles out of the hollow fibres of these muscles, wherein they are inclosed ; but, though this theory is admitted by most authors, M. Reaumur shews it to be false by the following considerations : 1. Because no numbness is conveyed, if the hand be at the least distance from the torpedo ; whereas, to use their own comparison, if the fish numbs as the fire warms, the hand would be affected at a distance from the one as well as the other. 2. Because the numbness is not felt till the contraction of the muscles is over ; whereas, were the cause in torporific particles thereby expressed, the effect would be felt during the time of the contraction. 3. Because, if the numbness were the effect of such particles, it would be conveyed by degrees, as the hand warms by degrees. 4. Because the torpedo conveys its numbness to the hand through a hard solid body, but does not do it through the air.

Abyssinians

Abyssinians use the torpedo for the cure of fevers, by tying the patient to a table, and applying the fish successively to all his members, which puts him to great pain, but effectually carries off the disease. Bellonius assures us, that the torpedo, applied to the soles of the feet, has proved successful against fevers; and Dr. James says, it mitigates the violence of the pain in an inveterate head-ach: but we suppose such instances very rarely occur.

BUILDINGS.

UNDER this head the reader will not expect to find any thing very remarkable, in countries inhabited by people, who have scarce any knowledge of the arts and sciences, either liberal or mechanical. If there are any good structures in those parts of the world, they are owing to Europeans who have settled there for the sake of trade; and these buildings are chiefly forts and factories, wherein we may suppose regard is had more to strength and convenience, than to magnificence or ornament.

THE negro-houses and towns, consist only of small conical cabbins, with no other light than what enters by the door, which is so low, that they are forced to stoop in entering it; after which, a man of ordinary stature cannot walk round, without hitting his head against the walls. In these little huts, fathers, mothers, brothers, sisters, servants and slaves, lie together promiscuously. They are formed of a kind of wicker-work, plastered over with earth, and covered with long grass and palmetto leaves; but are sometimes joined together by walls; by which means, those of superior rank have distinct and separate apartments

ments, for the different parts of their families, and an additional hut for the reception of strangers. In some parts a number of these huts built promiscuously together form towns, and in other places, their towns are built of a circular form, with spiral streets; hence in a village, not half a mile in diameter, it is said, that a person is frequently obliged to walk two or three miles to visit an acquaintance, when, by a short cross street, the distance might be reduced to an hundred paces.

SOME nations of the Mundingoes, however, build in a more commodious manner, the walls, being made of a fat binding clay, that seems smooth and hard like porcelain; their structures are thatched with straw, which projects beyond the building, to a little wall breast high, forming a small gallery round the hut, in which they are sheltered from the rays of the sun. Mr. Adamson mentions a village burnt down before his arrival, where the walls that withstood the violence of the flames were partly of a beautiful red, and in a manner vitrified by the intense heat; but, at a distance, the whole seemed covered with a bright enamel, and resembled the finest china.

THE Pholey towns indeed are built in a regular method, the houses being ranged in strait lines, and at proper distances from each other, to prevent the spreading of Fire; and thus they have good streets and passages, a thing which the Mundingoes do not regard. The Pholeys houses are kept very sweet, for they are a cleanly people, especially the women. Their towns are surrounded with palisadoes, within which they have plantations of cotton, and on the outside of this fence, they sow their Indian corn. They have also a place near each town for their cattle, in the middle of which, is built a sort of stage about eight feet high

high from the ground, and eight or ten feet wide ; which is ascended by a ladder, and has a roof of thatch over it, but the sides are all open. Here, four or five men sit up all night, with their arms, to guard the cattle from the lions and other ravenous animals. Numbers of stakes are drove into the ground in rings round the stage, and every evening the cattle are brought out of the meadows, and tied each to a stake, with a strong rope, made of the bark of trees. They are so tame, and accustomed to this confinement, that they come to it without any difficulty ; and, being milked in the evening, and again in the morning, they are turned loose into their pastures, where they are watched by herdsmen, to prevent their getting into the corn, or running into the woods. These Pholeys understand very well the breeding and managing of cattle, and are almost the only people high up the river of whom beasts can be purchased. What we have said may give the reader some idea of a Pholey town, most of which are built upon the same model.

Of the Negroes of NIGRITIA and GUINEA.

CHILDREN of both sexes wear no cloaths till they are thirteen or fourteen years of age, when those of distinction wear a cotton cloth from the waist downwards, while the poorer sort remain in their primitive nakedness. The women of the middle rank wear girdles of rushes, or palm leaves, neatly interwoven and hanging down to their knees. They likewise have copper, brass, or iron bracelets round their wrists, and large rings upon their legs, to which they hang silver bells. The most common dress is the tomy, which is made of woollen cloth, manufactured by themselves.

selves. This the women tie round their waists, letting it fall to the knee; but the men, fixing it before, bring it between their legs, and fasten it to their girdle behind. Despicable as this dress must appear, those who wear it are not without vanity, taking great pleasure in adorning their woolly locks with little plates of gold, and other ornaments. The women endeavour to attract the regard of the men, by making a line of white, yellow, or red paint across their forehead, with circles of the same round their arms, legs, and waist. The men wear much the same ornaments, which differ only in the size of the bracelets and rings on their arms, legs, fingers, and toes. The poorest negro is seldom without some of these, and their number is increased in proportion to the wealth and vanity of the wearer.

THE furniture of the common people consists only of a few earthen vessels, wooden bowls, dishes, plates, calabashes, and the like utensils; their mats supplying the place of chairs, tables, and beds, except one bed for the master of the family, which consists of a kind of hurdle laid upon cross pieces of wood, supported by wooden forks, a foot above the ground; upon this they throw a mat, which serves them for a matrafs, and frequently also for sheets and covering.

BOTH the negroes of the interior countries, and those on the coast, are said to be so libidinous, as to abridge their lives, and even to emaciate themselves before they reach their prime. This is said to be their greatest vice; and indeed nothing can be more prejudicial to society. In every other respect, they are said to be temperate, modest, gentle, and sociable, in a far greater degree, than the negroes on the coast. They have an aversion to the shedding of human blood, and very seldom make war.

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war but in their own defence. They are united by friendship, and ready to assist and relieve each other. Hence, if a friend be under misfortunes, they will share their cloaths, their provisions, and all they have with him; and, should it be their case to be distressed, they would meet with the same treatment from him.

POLYGAMY is allowed in all the negro nations; but, how numerous soever the wives may be, the husband chiefly attaches himself to one; but, both here and on the coast, they abstain from the connubial embrace, from the instant a woman is discovered to be pregnant.

In the interior kingdoms of Sierra Leona, every child has a name given him on the tenth day after his birth, when the father, taking the infant, is attended by his domestics armed with bows and arrows, and makes a tour round the town, singing a kind of triumphal song, accompanied by instrumental music; while all the people they meet join their voices. Afterwards, a person takes the infant, and laying him upon a shield, placed in the midst of the assembly, puts a bow and arrow into the infant's hands, and then pronounces a long discourse to the spectators; after which he addresses himself to the infant, wishing his prosperity, and that he may resemble his father in his industry, faithfulness, and hospitality; that he may be able to build his own house, and to conduct his own affairs; have no inclination for the wives of his neighbours, but be affectionate to his own; and be neither a drunkard, a glutton, or a spendthrift. Then giving the infant a name, he restores him to the arms of his mother or nurse; and the assembly disperses, except a few select friends, who have an entertainment provided for them, and spend the day in mirth and festivity. If the child be a female,

male, it is carried by the mother or nurse to the midst of the town, where the concourse is greatest, and there laid upon a mat, with a stick in her hand. A female orator pronounces a speech, with her wishes that the child may inherit the accomplishments of the mother, and, like her, be possessed of every female virtue, as chastity, obedience to her husband, and affection to her children.

THE different nations of Sierra Leona acknowledge one supreme Being, the creator of all things, whom they call Canno, and to whom they attribute omnipresence, infinite power and knowledge. But they believe that the dead are converted into spirits, whom they call januanins or protectors, who are employed in guarding their former friends; and their veneration for them is so extreme, that every village has a sacred grove, set apart for their worship, to which, great quantities of provisions are brought in the proper seasons; and those persons, labouring under any affliction, implore the aid of the Januanins; but women, children, and slaves, are not allowed to enter these sacred retreats; for a trespass of this nature they suppose would be instantly punished in the most exemplary manner.

THE Quojans, one of these nations, have no less faith in magicians and sorcerers, who they imagine suck human blood. They likewise believe there are other enchanterers, whom they style Billees, that have a power over the seasons, and can either promote, or entirely stop the growth of rice. Hence they never venture to pass through a wood without company, for fear of meeting with a billee, busied in culling plants and herbs.

THESE imaginary invisible agents, particularly the Januanins, are artfully made, the moving springs, by which the affairs of government are conducted; for if a woman be accused of adultery,
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and there appears no other proof, but the allegation of her husband, she is acquitted upon beseeching a spirit named Belli Pocri, to confound her, if she varies from the truth ; but if she be afterwards convicted, her husband must bring her in the night to a public place, where the council sits ; and there, after invoking the januanim, her eyes are covered, to prevent her seeing those beings, who are to carry her out of the world ; and she is left for a while in the belief, that this will certainly be her fate. When she has suffered the most dreadful apprehensions, and the most painful suspense, the eldest in council begins a solemn discourse on the shamefulness of a disorderly life, threatening her, if she persists in her guilt, with the most cruel punishment. Suddenly a confused murmur, that passes for the voice of the januanim, is heard, declaring, that though her crime merits the most rigorous chastisement, she will be pardoned, on account of its being her first transgression, enjoining certain mortifications, and recommending the most austere chastity. But if she fall a second time under the same censure, the chief priest, with one of his ministers, and proper officers, go early to her house, making a prodigious noise, with a kind of rattles ; and seizing her, bring her to the court, where she is ordered to walk three times round the market place, attended by the same noise and instruments. Then, without hearing her defence, or promises of reformation, they conduct her to a wood, sacred to the januanim, from which time she is never more heard of, nor are the people ever permitted to mention her name, they being so credulous as to believe, that the januanims have carried her out of the world.

Mr. FRANCIS MOORE, several years factor to the royal African company of England (whom we have occasionally quoted already) has given us great light into those parts of Africa, which border on the river Gambia, to the distance of five hundred miles from the ocean. The different kingdoms, says he, upon the banks of this river, are inhabited by several races of people, Mundingoes, Jolloifs, Pholeys, Floops, and Portuguese; which last, having settled there about the year 1420, have cohabited with the Mundingoes, till they are almost as black as they are; but they still retain a sort of bastard Portuguese language, and nothing vexes them more than to call them negroes, that being a term which they use only for slaves. The Mundingoes are the most numerous of these nations.

ON the north side of the Gambia, lies the country of the Jolloifs, which is very large, extending, even to the river Senegal. These people are much blacker and handsomer than the Mundingoes, not having the broad noses and thick lips, peculiar to the Mundingoes and Floops. In short, none of the countries about this river can come up to the Jolloifs for blackness of skin and beauty of features.

IN every country and kingdom, on each side of the river there are some Pholeys, a people of a tawny colour, much like the Arabs, who live in hords or clans, build towns, and yet are independent of the kings in whose territories they live; for if they are ill treated in one nation, they break up their town, and remove to another. They have chiefs of their own, who rule with great moderation, and this form of government goes on easily, the people are of a good and quiet disposition, and so well instructed in what is just and right, that

that a man who does ill, is the abomination of all, and none will support him against the chiefs, or endeavour to screen him from justice. The natives here using very little land, the kings are willing enough to give the Pholeys leave to cultivate as much as they please; and accordingly, though strangers, they are the greatest planters in the country. They are very industrious and frugal, and raise much more corn and cotton than they consume, which they sell at easy rates, and are very hospitable and kind to all; so that the natives reckon it a blessing to have a Pholey town in the neighbourhood. As their humanity extends to all, they are doubly kind to those of their own race; insomuch that, if they know of one of them being made a slave, all the Pholey's will join to redeem him. Having plenty of food, they not only support the old, the blind, and the lame amongst themselves, but, as far as their ability goes, supply the wants of the Mundingoes, great numbers of whom they have maintained in times of famine. They are very seldom angry, and Mr. Moore never heard them abuse one another; though this mildness does not proceed from want of courage; for they are as brave a people as any in Africa, and handle their arms with great dexterity. None of them, except here and there one, will drink any brandy, or any thing stronger than water and sugar.

ON the south side of the river Gambia, and but a little way inland, are the people called Floops, who are in a manner wild. They border close to the Mundingoes, and are bitter enemies to each other. Their country is of a vast extent; but they are under the government of no one chief, and yet such an union subsists among them, that the Mundingoes with all their forces, though very

numerous, cannot reduce them to subjection. They have the character of never forgiving, or at least never suffering an injury to go unrevengeed; but then, to make amends, the least good office done them is always repaid by a grateful acknowledgment.

As to the languages used about the river Gambia, the most general is the Munding, by which name the country, as well as the people is called. If you can speak that language, you may travel from the river's mouth up to the country of the Joncoes, or merchants, so called from their buying every year a vast number of slaves there, and bringing them down to the lower parts of the river, to sell the white people; which country Mr. Moore believes to be no less than six weeks journey from Jame's Fort, which belongs to the African company, and is situated on an island in the Gambia, about ten leagues from the mouth of the river.

THE next language mostly used in this country in the Creole Portuguese, which is so corrupted, as to be scarce understood at Lisbon; but it is sooner learnt by Englishmen than any other language in those parts, and is always spoken by the linguists who serve both the separate traders and the company. The Arabic is spoken by the Pholeys, and by most of the Mahometans on the river, though they have also a vulgar tongue, the Arabic being to them what latin is to us in Europe. The Mundingoes have also a cant language, which is spoken only by the men, and is seldom made use of in any discourse but what relates to a dreadful bugbear, called mumbo-jumbo, by which the women are kept in awe. This stratagem being perhaps peculiar to these parts of Africa, Mr. Moore's account of it will doubtless be agreeable to the reader.

THE mumbo-jumbo, says our author, is a kind of idol dressed in a long coat made of the bark of trees, with a tuft of fine straw on the top of it; and when the person wears it, it is eight or nine feet high. This is a thing invented by the men to keep their wives in subjection, who are so ignorant (or at least they are obliged to pretend to be so) as to take it for a wild man; and indeed a stranger would hardly take it for a human creature, by reason of the dismal noise it makes, which few of the natives can imitate. When the men have any dispute with the women, this mumbo-jumbo is sent for to decide it, which is always in favour of the men. His authority is such, that he can order those about him to do what he pleases, either to fight, kill, or make prisoners; but it is to be observed, that no body is allowed to come armed into his presence. When the women hear him coming, they run away and hide themselves; but sometimes he sends for them all to come and sit down, and orders them to sing or dance, just as he pleases; and if any refuse to come, they are brought by force and whipped. This bugbear never comes abroad but in the night-time, which makes it have the better effect. In the day-time the coat is fixed upon a pole near the town it belongs to, there being few towns of note without one.—When a man enters into this society, he swears in the most solemn manner never to divulge the secret to any woman, or to any person who is not a member of it; and none are admitted under sixteen years of age. The people swear by the mumbo-jumbo, and the oath taken by it is very strictly observed.

ABOUT the year 1727, the king of Jagra, having a very inquisitive woman to his wife, was so weak

as to disclose to her the whole secret of this mystery, and she revealed it to some other women of her acquaintance. This at last came to the ears of some who were no friends to the king, and having consulted upon the matter, and fearing they should not be able to govern their wives if the thing took vent, they took the coat, put a man into it, went to the king's town, sent for him out, and taxed him with it, which he not denying, they sent for his wife, and killed them both upon the spot. So the poor man died for obliging his wife, and the poor woman for her curiosity.

WE shall now give a concise view of the customs and manners of the inhabitants of Guinea, the whole coast of which is much frequented by the Europeans, and is usually divided into the slave, the gold, the ivory, and grain coast. Though this whole country is so unhealthy for European constitutions, the natives have but few distempers. The small-pox is the most fatal to them of any, sometimes sweeping them away like a plague, as is the case in other warm climates. Another epidemical distemper is that of worms, which are found between the skin and the flesh in all parts of their bodies, but chiefly in the legs, and give the patient very great torment till they are extracted. The manner in which they are drawn out is this: when the worm has broke through the tumour it occasions, his head commonly appearing first, after they have drawn it out a little way, they fasten it to a stick, round which they wind a small part of it every day, till the whole be extracted, and the patient freed from his pain. If the worm happens to break, the torture is increased, the remaining part either rotting in the body, or breaking out at some other place. Some
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of these worms are said to be an ell long, and others much longer*.

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* We have an account that in Persia there are very slender worms, six or seven yards in length, which breed in the legs and other parts of men's bodies; and in the Philosophical Transactions we read of several remarkable operations, whereby worms were taken out of unsuspected parts of the body, the operators being chiefly women. Mrs. Mary Hastings is there recorded as famous for discovering worms hid in the face, gums, tongue, &c. which, with a goose-quill, she could take out of any part affected. Mr. Dent relates, that he himself was cured of certain tumours on his tongue by Mrs. French, who, piercing the swelling with a lancet, drew out five or six worms at a time; insomuch that in eight days, he assures us, she took out of his tongue above a hundred worms, and thirty out of his gums. It is true, the ordinary place of worms is in the intestines, though there is scarce any part of the body but is sometimes infected with them; and as to those bred in the legs, the case is common enough among the negroes, and very well attested. Mr. Smith, in his Natural History of Nevis, tells us, that his negro-man had a slender whitish worm that came gradually out of his leg, not far from the shin-bone, at the rate of an inch or more every day. As it came out, he wound it round a very small piece of stick, that part of it immediately dying when tied fast with a piece of silk. His leg swelled and was very painful before the worm had forced it's way through the skin, but then it grew somewhat easier; however, if by rubbing his leg against any thing the worm happened to break, his leg would swell again till the remainder of the worm came out in the same gradual manner, after which the sore was soon healed without a plaister. This worm was about a yard and a half long; but what is this, or even the length of those worms in Persia, compared to that of the tape-worm or joint-worm, which lies variously convoluted in the intestines, being sometimes as long as all the guts, and sometimes a great deal longer? Borrichius assures us, that a patient of his voided, in a year's time, eight hundred feet of this sort of worm, without coming to the head: for the patient always observed it to break off in voiding. Dr. Tyson himself had a patient who voided vast quantities of this worm for several years, in pieces from two to six or more yards in length,

THE slave coast, which lies to the east, is sandy, barren, and without wood or trees, except the palm, great numbers of which grow there; yet it is pretty well provided with cattle, and there is no want of river fish; but they can get none from the sea, on account of the prodigious surf on the coast. But in some parts, on leaving the shore, the scene is changed from a dreadful swelling surf and barren sand, to most beautiful meadows and fields, enamelled all the year with the finest verdure, particularly in the kingdom of Whidah, where the land rises by an easy and equal ascent, towards the interior parts, affording the most delightful landscapes. The height of the ascent is bounded by a chain of mountains that defends the country from it's neighbours to the north-east. The trees are straight and tall, presenting to the eye fine groves, and extensive avenues, clear of weeds and brush-wood. Every part of the country is there converted to some use, except those destined by nature for pleasure, where the woods spring up spontaneously in the most beautiful rural simplicity. Spring and autumn swiftly succeed each other; for no sooner has the husbandman cut his corn, than he again plows and sows the ground; yet it is so far from being worn out, that the next crop springs up with the same vigour as the former. With all these advantages, Whidah is so populous, that one

length, which all put together, he says, would much exceed the length of that of Borrichius. The joints in this worm are very numerous, for in a piece four and twenty feet long the doctor counted five hundred and seven; and on each joint he observed a protuberant orifice, which he takes to be so many mouths, the best microscopes discovering no mouth in what usually passes for the head of the animal. It is frequently found in dogs, oxen, and several sorts of fishes.—See Dr. Tyson's account of this worm in the Philos. Trans. No. 146.

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single village contains as many inhabitants as some petty kingdoms on the same coast.

THE negroes of Whidah are, in general, tall, well made, straight and robust. Their complexion is black, but not of such a glossy jet as that of the people on the gold coast. The people are, in general, better dressed than most of the other negroes on the coast. The dress of the king, who is esteemed the most powerful monarch in Guinea, and that of the great officers, is nearly the same, and very different from that of the common people; it consisting of a piece of white linen, about three ells long, wrapped round their waist, in a decent and becoming manner; and then hanging down to the feet like a petticoat. Upon this they wear a silk garment of the same size and form, and over this last have a richer piece of silk, six or seven ells in length, which they tie by the two corners, and making a great bunch on the right hip, the rest hangs down to the ground, so as to form a train; but none are allowed to wear red, except the royal family. Some authors say, that the king and the great officers wear necklaces, with gold chains and bracelets of pearl, gold and coral. The common people wear nothing on their heads to shelter themselves from the rain, or the heat of the sun; but the great men cover their heads with an European hat and feather. As to the common people they generally wear only a cotton-cloth, or a few herbs, fastened round their waist; but the women of the same rank, have five or six cloths, the longest of which covers half the leg; and the others, which are over it, are each shorter than the other.

THE king's wives, and those of the great men, are like the rest, naked from the girdle upwards, and from the waist downwards, have two or three coverings of cotton and silk, the longest of which

reaches to their ancles, and the others are a little shorter. These are all very large, and form a roll about the hips, that makes them appear as if they wore a hoop-petticoat. They are adorned with necklaces; from the wrist to the elbow, they have strings of pearl, gold, and coral; and on their heads wear a cap of platted and coloured straw, which is very light, and has some resemblance to the pope's triple crown.

BOTH the Europeans, the nobility, and all the rich negroes, when they go abroad, are carried in palanquins, which are here a kind of covered hammocks, and are an excellent defence against the heat of the climate, which is so great, that an European cannot walk in the middle of the day, without extraordinary fatigue.

THE inhabitants of Whidah exceed all the negroes in good and bad qualities. They treat the Europeans with extraordinary civility, courtesy and respect, and have an obliging manner of addressing each other. According to Bosman, in their servility, and several other respects, they perfectly resemble the Chinese. Thus, when any one visits, or accidentally meets his superior, he instantly drops upon his knees, kisses the earth three times, claps his hands, and wishes him a good day or night, which the other returns in the posture in which he then happens to be, by gently clapping his hands, and wishing him the same. The like respect is shewn to fathers by their children, to husbands by their wives, and to an elder brother by the younger. Every thing is delivered to, or received from, a superior on the knee; and the clapping of the hands together, is esteemed a mark of still more profound respect. When persons of equal rank meet, they each drop down, clap their hands, and mutually salute each other, while the
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same ceremonies are observed and imitated by their several attendants; whence above a hundred persons may sometimes be seen down on their knees together; and this idle ceremony, says he, might easily be mistaken for their being engaged in some public act of devotion. If a superior sneezes, all round him fall on their knees, clap their hands, and wish him happiness. Though idleness is the favourite vice of the Africans, people of both sexes are here so laborious and diligent, that they never desist till they have finished their undertaking; carrying the same perseverance into every action of their lives. Like the Chinese too, they are so extremely addicted to gaming, that after having lost their whole substance, they play for their wives and children; and when they have lost them, stake their own liberty, and thus become slaves to their own countrymen. It is surprising, says our author, how a nation confined to so small a spot of ground, should differ so widely in their manners, from the surrounding kingdoms, with which they keep up a constant intercourse. One would imagine that they had a soil, a climate, and a nature peculiar to themselves, and different from that of the people who are only a few miles distant.

THE crown of Whidah is hereditary, unless the great men have some extraordinary reasons for excluding the eldest son, and placing the crown on the head of one of his brothers. But the eldest son must have been born after the king's accession, for those he had before his ascending the throne, are only considered as private persons. They have here a very extraordinary custom, which, it is said, is never to be violated. The successor is no sooner born than he is carried by the great men into the province of Zangua, on the frontiers of the kingdom, where he is educated as a private person,

without knowing his birth ; and none of the great men are allowed to visit or receive visits from him. Those charged with his maintainance, though they know his birth, are prohibited under pain of death, from giving him the least hint of his quality, or treating him otherwise than as their own child. By this means the prince knowing nothing of state affairs, is obliged for a long time to abandon the government to the management of his nobles, and generally passes several months, and frequently some years, before he is crowned ; but this is no sooner done, than he instantly becomes a kind of deity, who is never approached but with the most profound reverence. The nobles of the first rank, are sometimes permitted to eat in his presence, but never with him ; for this honour is reserved for his women alone, who are said to amount to three or four thousand. And it is never known in what part of the palace he sleeps. The ignorance and meanness in which he is bred, generally gives him a high relish for pleasure, and he usually lives in a most slothful, luxurious, and debauched effeminacy among his women, without enjoying the conversation of men, or those exercises that are adapted to strengthen his mind, and give vigour to his body.

BUT notwithstanding the king's being treated with the utmost servility by his own subjects, when the captains of ships wait upon him, he receives them in the hall of audience, causes easy chairs to be brought them, and sometimes drinks and smokes with them. Trade has introduced into Whidah many of the elegancies and luxuries of Europe, and all the nobility and rich merchants, endeavour to furnish their houses, in the same manner. The palace is adorned with magnificent beds, canopies, easy chairs, looking-glasses, and every thing fit to adorn

adorn a house in that climate. The king and nobility are furnished with cooks, instructed by those of France; so that when an entertainment is given to an European, he finds the tables of the negro lords served with as many delicacies as those of Europe. They are covered with fine linen, and vessels of silver and services of China. Wine is brought them from France, Spain, Madeira, and the Canaries; they are also supplied with brandy, sweetmeats, chocolate, tea, and coffee. This elegance is, however, confined to the great and wealthy, for the common people still preserve their ancient manners.

THE most sensible part of the people believe in one spiritual Being, who rewards virtue and punishes vice; who causes the sun to shine, the heavens to thunder, the sky to be covered with lightning, and the clouds to pour down rain. They maintain that his residence is in the heavens, whence with infinite goodness he governs the world; but suppose that it would be presumption in them to address their petitions to him, and therefore they have four principal objects of worship; the serpent, which holds the first rank, the trees, the sea, and Agoya, the God of councils.

THE people thus account for their worshipping the serpent: the inhabitants of Whidah being ready to give battle to the king of Ardrah, a great serpent came from the enemies army to theirs; and appearing to fawn upon every body, the chief marabout, or high priest, ventured to take it in his hands, and holding it on high, shewed it to the whole army, who being amazed at the prodigy, prostrated themselves before the harmless animal, and then attacked the enemy with such courage and resolution, that they gained a compleat victory, which the credulous soldiers attributing to the snake,

snake, they took it with them, built it a house, brought it provisions, and in a short time, the new God eclipsed all the others. As it's worship encreased in proportion to the imaginary favours they received from it, they erected a more sumptuous house, with many courts and spacious lodgings; it had an high priest, and an intire order of marabouts to serve it. They dedicated to it, the most beautiful women, and that it might never want servants, they annually chose new ones. This serpent is still worshipped in his house or temple, upon various occasions; but the offerings and sacrifices made to him, are far from being confined to bulls and rams, loaves of bread and fruit; the high priest frequently prescribing a considerable quantity of valuable merchandize, as gold-rings, brandy, gunpowder, &c. Very sensible negroes in other respects, gravely assert, that the serpent they now worship, is the same to which they owe the victory which freed them from the oppression of the king of Ardrah; it has however multiplied extremely, and it's posterity do no injury but permit the people to put them into their bosoms, and into their beds.

THEY are enemies to none but the black serpents, which they always endeavour to destroy. The people cannot mistake one for the other, the venomous serpent being black, four yards long, and only an inch and a half in diameter; while the beneficent serpent, seldom exceeds five feet and a half in length, and yet is of the thickness of a man's leg. It's head is large and round, it's tail pointed, and it's skin, is of a whitish colour, agreeably diversified with waves of yellow, brown, and blue.

THE inhabitants of this country esteem themselves happy when one of these snakes honours their house with it's presence; and not only make it

it a bed, but if it be a female with young, make her a little house, to which she retires to bring them forth; and when she or her young want food, bring it them. If any one should venture to kill one of those reptiles, he would be put to a cruel death. However, neither the black snakes, nor the swine, pay any regard to their divinity, but kill and eat them; though it always costs the life of those animals, when they are caught in the fact; and nothing can save a hog from being instantly killed; in this case, the people have no respect to those to whom they belong; for though they are the king's, they are killed on the spot, and their flesh is the property of him who slaughters them.

THE inhabitants of Ardrah are in many respects, different from these of Whidah. The dress of the courtiers consists of two silk or brocade paans or petticoats, with a broad scarf drawn across the breast and shoulders. The people of inferior rank wear five or six paans, one over another, made of cotton-cloth, manufactured in the country; and those who can afford it, have them adorned with gold studs. Many persons of distinction wear over their shoulders, a short sattin mantle, as a morning dress; but in visits, this is laid aside, and the natural black skin preferred, as more beautiful and becoming. The high priest has a long piece of white cotton wrapped round him, plaited in a pretty taste. He has long cotton drawers; on his head, he wears either a cap, or an European hat; and on his feet, slippers or sandals of red leather; by his side, he has a large cutlass, with a gilt handle, and carries a cane in his hand. He alone stands covered in the king's presence; but the nobility pull off their caps and slippers before they enter the presence-chamber.

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THE women are extremely fond of dress; they appear clothed with the finest sattins, chintz, and brocades, adorned with a profusion of gold; the men never thinking them genteelly dressed, without their being loaded with a superfluous quantity of silk.

THE most usual food of the inhabitants is beef, mutton, pork, goats, and dogs-flesh, with rice, fruit, roots, and many kinds of vegetables; and they are so far from worshipping the tame and gentle serpents of the adjacent kingdom of Whidah, that they search for them, in order to kill and eat them.

ALL the Pagan negroes, and even the inhabitants of Madagascar, have what they term their fetiches, but in different countries, these kind of idols, have different names, and are formed of different substances. The people of this country give that name to some ornament worn on the head, or to any other substance, dedicated to an invisible spirit. Besides each feticheer, or priest, has here a peculiar fetiche, prepared in a different manner. This is, for the most part, a large wooden pipe, filled with earth, oil, blood, the bones of dead men and beasts, hair, feathers, and the like. By these mixtures, formed to affect the minds of the superstitious, the priest and people, probably suppose, that there is formed a kind of necromantic charm, by which some spirit may be prevailed on to perform what is desired. Thus, if a negro on the gold coast takes an oath before this fetiche, he first inquires of the priest, what is it's name, each having a peculiar one; then calling the fetiche by it, he repeats what he is to confirm by oath, desiring that he may be punished with death, if he swears falsely; then walking round the pipe, he stops at the same place, and repeats the oath a second

cond time as before, and after this a third time. The feticheer then takes some of the ingredients out of the pipe, with which he touches the person's head, arms, belly, and legs: and, holding it above his head, turns it three times round. He then cuts off a bit of the nail of one finger on each hand, and of one toe on each foot, and some of the hair of the head; all which he puts into the pipe, and thus the ceremony is concluded.

THE negroes of the eastern part of the ivory or tooth coast are called Quaques; and are rather above the common stature, clean limbed, and well proportioned; but though, at the first glance, their features appear very disagreeable, they are represented as the most rational, civilized, and polite people in all Guinea. They are said to consider long nails as a great ornament, to dress their hair in tresses, which they keep separate, by a paste of palm oil, and a kind of red earth; and daily to anoint their bodies with the same kind of paste. They wear round the small of their legs, large iron rings, and are pleased with their jingling sound, and that of the bells fastened to them; in the multitude of which, their dignity and grandeur consists. The common people have no other cloaths, but a piece of cloth fastened round their waist; the wealthy, however, have a sort of cloak or surplice, with long sleeves which hang down below their knees; and by their side, wear a hanger.

ACCORDING to Villault, their women, setting aside their complexion, which is a jet black, would in Europe, pass for beauties, from the brillancy of their eyes, the regularity of their features, and their tall, slender, genteel shape. Some of them, adorn their hair with little gold plates; in the making of which their artists endeavour to excel. These plates are, in general, thin, small, and of little value,

value, but some women wear such a number of them as make them amount to a considerable sum. Those unable to adorn their heads with such splendour, divide their woolly hair into a multitude of small tresses, which they adorn with ivory, cowries, pieces of oyster-shells, and other shining baubles; which are also worn by those who have plates of gold. The women wear only a cloth hanging down before.

THESE negroes drink a kind of beer called pito, and palm-wine, mixed with water; and according to Des Marchis, drunkenness is considered by them as a crime of so odious a nature, that the laws have prohibited it under the severest penalties; it being a maxim among them, that to destroy one's reason, is to level man with the brute; to prejudice society, by robbing it of its useful members; and to destroy the effects of all laws and government; since a man, void of reason, is ignorant of the propriety of action, and cannot be influenced by laws. They are offended at observing, among the Europeans, the men kissing each other, after a long absence, or at parting; which they consider as an affront to the other sex. Their form of saluting is laying hold of the fingers, and making them crack.

IT is said to be here a constant rule, as well as in India, for the son to follow the profession of the father; the son of a weaver, being always bred a weaver; and that of a smith, a smith; but this is so far from improving them, in the knowledge of the mechanic arts, that they are still very indifferent workmen. According to Mr. Atkins, a common lock is such a curiosity, as to draw a great number of people together to see it; a watch still increases their admiration, and what they term making paper speak, is quite miraculous. If they
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are sent with a note, and told the contents before they go, they frequently make the experiment, whether the Europeans deceive them, in pretending to interpret the thoughts of an absent person, by those crooked characters: this they do by asking the contents, when their surprise is inconceivable, on hearing the note read. Of this they can form no idea, and therefore are ready to believe that the white men have some familiar spirit that acts as factor or broker on these occasions. These negroes, however, make pieces of cotton, that are not only extremely fine, but have very beautiful colours.

MANUFACTURES, TRADES, &c.

THE negroes of the grain coast are esteemed excellent mechanics, particularly the smiths, who understand the art of tempering steel and other metals, making arms, and other instruments of steel. They have also workmen who build canoes of different sizes, upon certain regular principles. They have likewise made several improvements in husbandry, particularly with respect to the cultivation of rice, millet, and Guinea pepper.

THE Jolloifs, as Mr. Moore informs us, make the finest sort of cotton-cloth, and that in large quantities. Their pieces are generally twenty-seven yards long, but never above nine inches wide; so that they cut them to what length they please, and sew them together very neatly, to make them serve the purpose of broader cloths. After the cotton is cleansed from the seed, they spin it by hand, with the spindle and distaff, and weave it with a shuttle and loom of very coarse workmanship. For wearing, they make them up into pairs, one about three yards long, and a yard and a half wide,

wide, which is to cover their shoulders and body ; the other about the same width, only two yards long, to cover them from the waist downwards. Such a pair is cloathing either for a man or woman, but the manner of wearing them is somewhat different. Our author says he has seen a pair of cloths so fine, and dyed so bright, as to be worth thirty shillings sterling. Some of their colours are very lively, which are either blue or yellow, the former dyed with indigo, the latter, with barks of trees.

THE negroes in general have few manual arts among them, which yet seems more owing to idleness, than want of capacity. Those of Guinea are chiefly employed in matting of chairs, making wooden or earthen cups, copper ointment boxes, and arm-rings of gold, silver, or ivory, with some other toys. Though their tools are very indifferent, they can make sabres and all sorts of arms they want, (guns only excepted) as well as whatever is required for their agriculture or domestic uses. Their chief implements are a kind of hard stone instead of an anvil, a pair of tongs, and a small pair of bellows, with three or more pipes, which blow very strong, and are an invention of their own. But their most curious manufactures are the gold and silver hatbands which they make for the Dutch, the thread and contexture whereof are so fine, that they would not be easily imitated by our European artists.

THE chief trade of Negroland and Guinea is in gold, slaves, elephants teeth, and bees-wax. Of the gold of these countries we have already spoken towards the beginning of this chapter ; and the same merchants that bring it from the inland parts to the factories on the river Gambia, bring likewise elephants teeth, and in some years, slaves to
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the amount of two thousand, most of which are prisoners taken in war. The merchants buy them of the princes who take them; and their way of bringing them is to tie them by the neck with leather-thongs, about a yard distant from one another, thirty or forty in a string, each of them carrying upon his head a bundle of corn, or an elephant's tooth. In their way from the mountains, they travel through very great woods, where, for some days they can get no water but what they carry with them in bags made of skins. They use asses as well as slaves in carrying their goods, but no camels nor horses.

BESIDES, the slaves brought down by the merchants, there are a great many purchased all along the river, perhaps a thousand one year with another. These are either taken in war, as the former, or people condemned for crimes, or else stolen, which is very frequent; but the African company's servants buy none of the last, if they suspect them to be such, without sending for the alcade (a sort of judge) or the chief men of the place, and consulting with them about the matter. Since the slave-trade has been carried on, the natives have changed all their punishments into slavery; and there being an advantage arising from such condemnations, they often strain hard for crimes in order to have the benefit of selling the criminal. Not only murder, theft, and adultery, but every trifling fault is punished in this manner*.

SEVERAL

* Mr. Moore tells us, that a man was brought to him to be sold for having stolen a tobacco-pipe; but he sent for the alcade, and with much ado persuaded the injured party to accept of a composition, and give the man his liberty — In Cantore, a man seeing a tyger eating a deer, which he had killed
and

SEVERAL of the natives have slaves born in their families, who sometimes grow very numerous; infomuch that all the inhabitants of a village near Brucoe, reckoned about two hundred people, are all the wives, slaves, or children of one man. In some parts of Africa they sell the slaves born in the family; but about the river Gambia they look upon such a practice with abhorrence. Mr. Moore never heard of more than one person that ever sold a family-slave, except for such crimes as they would have been sold for if they had been free. If one family slave commits a crime, the master cannot sell him without the joint consent of the rest; for if he does they will all run away, and meet with protection in the next kingdom.

WE are told that not only criminals and prisoners of war are sold for slaves, but debtors also; and sometimes the debtor's whole family and all his relations are included in the cruel sentence. It is likewise said that men sell even their wives and children when they have offended them, whilst others lessen their families under an apprehension they shall not be able to maintain them; and if a famine or great scarcity happens, they will sell themselves to one another for bread. One of the petty princes on the coast of Guinea is reported to have sold, on some small disgust, a score of his wives to a captain of a ship at once; and in times

and hung up near his house, fired at the tyger, and the bullet killed a man; upon which the king not only condemned him to be sold, but also his mother, three brothers, and three sisters. They were brought to Mr. Moore for sale, who was so much affected at the sight of them, that he would not buy them; but they were sent farther down the river, and sold to some separate traders, and the king had the goods for which they were purchased.

of full peace nothing is more common than for the negroes of one nation to steal those of another, and sell them to the Europeans. There have been instances also of children selling their fathers and mothers, when they have been weary of them, and wanted to enjoy their possessions; which has occasioned a law in some countries, that children shall not inherit the goods or estates of their parents. These are the various ways by which the unhappy negroes are frequently reduced from flourishing circumstances to a state of slavery, and brought down to the coast to be sold to the merchants of Europe*.

ANOTHER

* We cannot dismiss this subject without observing, that the slave trade is a sort of commerce scarce defensible either on the foot of religion or humanity. The African company's factors indeed are much to be commended for not purchasing such slaves as they suspect to be stolen, without inquiring into the affair: but as to the private traders, who frequently take the poor negroes by force, or decoy them on board and treacherously carry them off, the practice is utterly inexcusable, and deserves the severest punishment. Mr. Smith tells us, that when he was at Nevis, a captain of a private trader went to the coasts of Guinea, and having decoyed two sons of one of the petty kings of that country, with their attendants, on board his ship, sailed away for the West Indies, and sold them all. The gentleman who bought the boys fitted out a sloop with a proper cargo, and sent them back as a present to their father, not doubting to make an advantageous voyage of it; but the sloop was not returned when our author left Nevis. The captain (as he observes) was a villain, and an enemy to his country; for if the black prince, the father of the two boys, had massacred all the Englishmen that came in his way for some time afterwards, pray who could justly blame him?—Mr. Smith mentions another captain, who stole some negroes off the coast of Guinea, and sold a stout man and his wife, with a small sucking child, to a gentleman of his acquaintance at Nevis, who used them well; but the unfortunate man, having been a considerable person in his native country, could
not

ANOTHER great article of trade in Negroland and Guinea is ivory, or elephants teeth, which are got either by killing those animals, or picked up in the woods. It is a trade, followed by all nations about the Gambia, for whoever kills an elephant has the liberty of selling him and his teeth; but those traded for in that river are generally brought from the inland parts of the country, and many of them by the merchants. As to those found in the woods, whether they belong to elephants that had been dead many years, or whether those animals shed their teeth, as some have conjectured, Mr. Moore was not able to learn; but this is certain, that they find teeth without any

not bear the thoughts of working as a slave. However, to bring him by gentle degrees to relish a state of slavery, his master set him to look after his horses, mules, and sheep; but he had not been long in that station, before he quarrelled with another of his master's negroes, and killed him with a knife; upon which he fled with his wife and child to the woods, where he erected a hut, resolving to die rather than submit. Being soon found out, and his hut surrounded with armed white men and negroes, he first of all butchered his wife and child, and then came out of his hut with the bloody reeking knife in his hand, offering it to his master, and saying, that as he had fairly bought and paid for him, he had a just right to his life. The master told him he must surrender himself, and be tried by the civil magistrate; whereupon he struck at him with the knife, but was knocked down and secured. The next day he was tried, and condemned to be broke upon the wheel, and afterwards burnt alive; which sentence was strictly put in execution. When his arms, thighs, and legs were all broken to pieces with an iron crow, he did not so much as once cry oh! He then desired a dram of rum, which was denied him; but a draught of water was offered him, which he refused to accept. They then flung him into a large and fierce fire, where he expired with little or no concern.—Now what punishment did not the captain deserve, who stole the unhappy negro, and thereby occasioned this tragical catastrophe?

skull

skull or bones fixed to them, which makes the conjecture not improbable. The largest tooth our author ever saw weighed a hundred and thirty pounds; and the larger they are, it seems, the more valuable by the pound, for one tooth that weighs a hundred pounds is worth more than three that weigh a hundred and forty. Many of the teeth are broken-pointed, which lessens their value considerably; and some are white, and others yellow, but this makes no difference in the price. — One part of Guinea is called the tooth or ivory coast from the great numbers of teeth found there, or brought thither from the inland parts to be sold to the European merchants and factors.

THE next branch of trade on the Gambia is bees-wax, which is capable of great improvement. The Mundingoes make bee-hives of straw, of the same shape as ours in England; but they have a board at the bottom, with a hole in it for the bees to go in and out, and so are not placed on stands, but hung upon the boughs of trees. When they take the combs they smother the bees, and having squeezed out the honey, (of which they make a sort of wine) they boil up the wax with water, and press it through hair-cloths into holes made in the ground for that purpose. They make cakes of it from twenty to a hundred and twenty pounds weight, which the purchasers try by boring through them, those which are clearest from dirt being accounted the best.

THERE is another branch of commerce, which, if properly pursued, might prove of vast advantage to the nation in general, namely, the gum-trade; for there is a great deal of gum senegal annually imported to England.

It had been recommended to Mr. Moore, when in the company's service at the factories on the

river Gambia, to inquire after any new sort of goods that might be purchased, particularly gum, of which he accordingly procured about a ton at different times, and began to hope that this trade might be enlarged and made considerable by means of one Job Ben Solomon, a Pholey, whose history is so very remarkable, that though it may seem somewhat foreign to our purpose, we are persuaded it cannot fail of being agreeable to the reader. This man was a son of the high-priest of Bundo in Foota, a place about a week's journey over land from the company's factory at Joar on the river Gambia. In the year 1731, as he was travelling across the country with a servant and about twenty or thirty head of cattle, he was robbed and seized, together with his man, and both were sold to captain Pyke, commander of the ship *Arabella*, who was then trading at Joar. By him he was carried to Maryland, and there sold to a planter, with whom he lived about twelve months, at the end of which he had the good fortune to have a letter of his own writing in the Arabic tongue conveyed to England. This letter coming into the hands of Mr. Oglethorpe, he sent it to Oxford to be translated; which, when done, gave him so good an opinion of the man, that he directly ordered him to be bought from his master, he soon after setting out for Georgia. Before Mr. Oglethorpe returned from thence, Job came to England, where he was brought to the acquaintance of the learned Sir Hans Sloane, who found him a perfect master of the Arabic tongue, by his translating several manuscripts and inscriptions upon medals. Sir Hans recommended Job to the duke of Montagu, who being pleased with the sweetness of humour, and mildness of temper, as well as genius and capacity of the man, introduced him to court, where
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he was graciously received by the royal family, and most of the nobility, from whom he received distinguishing marks of favour. He sent letters from England to his father, and after having continued here about fourteen months, he had a strong desire to return to his native country. Upon his setting out from England he received a great many noble presents from her late majesty queen Caroline, the duke of Cumberland, the duke of Montagu, the earl of Pembroke, several ladies of quality, Mr. Holden, and the royal African company, who ordered their agents to treat him with the utmost respect.

HAVING embarked on board the Dolphin Snow, belonging to the company, Job arrived at James fort in August 1734, and some months afterwards proceeded up the river with Mr. Moore as high as Joar, the place where he was sold for a slave. In the January following a messenger, whom Mr. Moore had sent into Job's country, returned with advice that Job's father was dead, but that he had lived to receive the letters sent by Job from England, which brought him the welcome news of his son's being redeemed from slavery, and of the regard paid to him in this country: that one of his wives was married to another man, but that as soon as he heard of Job's arrival he thought proper to abscond; that since Job's absence from this country there had been such a dreadful war, that not so much as one cow was left in it, though when Job was there it was noted for numerous herds of large cattle. With this messenger came several of Job's old acquaintance, whom he was very glad to see; but, notwithstanding the joy which the sight of his friends gave him, he wept grievously for his father's death, and the calamities of his country. He forgave his wife, and the man

that had taken her; for, said he to Mr. Moore, she could not help thinking I was dead, being gone to a land from whence no Pholey ever yet returned; and therefore she is not to be blamed, nor the man neither.

WHILST the above-mentioned messenger was gone his journey, Mr. Moore and Job went frequently together to several places about the country; and as Job every where spoke handsomely of the English, it took away a great deal of the horror of the Pholeys for the state of slavery amongst them; for before this they generally imagined, that all who were sold for slaves were murdered, if not eaten, since none ever returned. His account of the English gave them also a great idea of the power of England, and a veneration for those who traded amongst them. He gave his country people a great deal of writing paper, which is a very useful commodity amongst them, and of which the company had presented him with several reams. He used to pray frequently, and behaved himself with great mildness and affability to every one, so that he was very popular and well-beloved.

It happened one evening, as Mr. Moore and Job were sitting together under a tree, that six or seven of the very people came by, who had robbed and made a slave of him about three years before. Job, though at other times an even-tempered man, fell into a most terrible passion at the sight of them, and was for killing them with his broad sword and pistols, which he always carried about him; but our author representing to him the ill consequences of such a rash attempt, he laid aside the thoughts of it, and was persuaded to sit down and pretend not to know them, but ask them questions about himself, to which they returned true answers. At last he inquired how the
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the king their master did, and found that he was dead, having lost his life by means of a pistol that was among the goods for which he sold Job to captain Pyke. This pistol the king used to wear slung about his neck with a string; and as they always carry their arms loaded, one day the pistol accidentally went off, and the balls lodging in his throat he expired in a few minutes. On hearing this news Job was so much transported, that he fell on his knees, and gave thanks to Mahomet for causing this man to die by the very goods for which he sold him into slavery; and then turning to Mr. Moore, “ You see now, says he, God Almighty
 “ was displeased at this man’s making me a slave,
 “ and therefore made him die by the very pistol
 “ for which he sold me, yet I ought to forgive
 “ him, because if I had not been sold, I should
 “ neither have known any thing of the English,
 “ nor have had any of these useful and valuable
 “ things I have brought over, nor have known
 “ there was such a place as England in the world,
 “ nor such noble, good, and generous people as
 “ queen Caroline, prince William, the duke of
 “ Montagu, the earl of Pembroke, Mr. Holden,
 “ Mr. Oglethorpe, and the royal African com-
 “ pany.”

To bring this history to a conclusion: when Mr. Moore left Africa, which was in the year 1735, Job parted from him with tears in his eyes, and at the same time gave him letters for the duke of Montagu, the company, and several gentlemen in England, desiring Mr. Moore to give his love and duty to them, and to acquaint them, that as he intended to learn to write the English tongue, he would, when he was master of it, send them longer epistles, and a full account of what should happen to him hereafter. He likewise begged of

Mr. Moore, that as he had lived with him almost ever since his return to Africa, he would let his grace and the other gentlemen know what he had done, and that he was going to accompany Mr. Hull to the gum-forest, and to settle such a good understanding between the company and his countrymen, that the English nation should reap the benefit of the gum-trade; adding at last, that he would spend his days in endeavouring to do good for the English, by whom he had been redeemed from slavery, and from whom he had received such innumerable favours.

THIS story being of a singular nature, and relating to the commerce and interest of our country, we hope it will be thought at least an excusable digression from our subject; to which we now return, and proceed to take a view of the remaining parts of Africa.

C H A P. IV.

OF ETHIOPIA, or ABYSSINIA, including NUBIA, and the Eastern coast of AFRICA.

ABYSSINIA, comprehending Nubia, is a large part of Africa, almost wholly situated within the torrid zone, having Egypt and the desert of Barca on the north; the Red sea and the country of Anian on the east; the same country of Anian and unknown parts of Africa on the south; and other unknown parts of Africa on the west.

NUBIA, which lies between Egypt and Abyssinia, though intirely under the torrid zone, is in many places very fertile, particularly on the banks of the Nile, where the inhabitants, as in upper Egypt,

Egypt, raise the water up to the high banks, by art and labour. Hence it produces some fine fruits, with plenty of sugar canes; but the natives are unacquainted with the art of making sugar.

THE ancient and celebrated kingdom, or rather empire of Abyssinia is sometimes called Ethiopia Proper, and has been likewise much talked of under the title of the States of Prester John *, tho', as some think, very absurdly. This empire was formerly much more extensive than it is at present, though even now it is a vast country, the several parts whereof are governed by proper viceroys, who have different titles. The extreme heat, to which the country is subject, is chiefly felt in the plains and valleys, whilst the ridges of mountains, most of which are of a prodigious height, enjoy a

* This title seems to have been given to the monarchs of Abyssinia on the following account. There was an ancient race of Christian princes in Proper Tartary, who bore the title of Prester or Presbyter John, as it was corrupted by the Europeans, though chiefly owing to an epithet which one of the first of those monarchs either took of Prestigian, or was complimented with by his subjects, that word properly signifying apostolical or orthodox, but which in its carriage to Europe had been changed into Prester John, on a supposition that he was a priest as well as king. The fame of this monarch was become so great in the time of John II. king of Portugal, that he sent Peter Covillan to make inquiry after him in India; but as he could hear nothing of such a prince there, and being informed there was a potent Christian emperor in Africa, he made that country in his way home; where he was so kindly received by the then reigning emperor, that he took it for granted he had found out the monarch so much sought after, though he could hear of nothing like the title of Prester John. This point hath been since much controverted among the learned abroad, some affirming the Abyssinian empire to be the real Prester John's country, and others treating the notion as absurd and chimerical: However, we shall not enter into the dispute, as being a matter of more curiosity than moment.

delightful coolness; insomuch that father Tellez assures us, there are some parts of the country where the summers are less sultry than in Portugal. This difference of heat and cold indeed between the high and low lands is attended with such thunder and lightnings as are terrible both to man and beast, and often do a great deal of mischief. The rains, when they descend, do not fall in drops, as with us, but sometimes pour down with such vehemence, that they carry off trees, houses, and even rocks before them, whilst the rivers overflow and lay the country under water. The winds are sometimes no less dreadful than the rains and thunder; and the country is subject to one in particular, which is rather a hurricane, and in their language is called *sengo*, or *serpent*. This is often so violent as to overturn trees, houses, and almost every thing in its way, but it in some measure makes amends for this mischief, by clearing the air of the lower grounds, which would otherwise stagnate and prove infectious, as they find by experience.

THE whole country is intersected, or rather covered with mountains, between which are such dreadful precipices as one cannot behold without horror; but some of the mountains have large plains at the top, covered with trees and other verdure, and afford springs of excellent cool water; and others are well cultivated, though the access to them is exceeding difficult and hazardous. The mountains of Amhara are of a vast height, particularly that called Amba Gesen, which is rocky, and every way inaccessible but by two narrow paths cut into the rock; but the top of it produces all that is necessary for life or delight. According to Tellez this mountain is shaped like a castle; the top of it is half a league wide, and the bottom about half a day's journey in circumference.

—Amongst

—Amongst the mountains of Gojame we are told of a vast hollow rock, opposite to which stands another so situated, that a word only whispered on the top is heard at a great distance, and the joint voices of several persons speaking at once sound as loud as the shout of a numerous army. — The face of Nubia, as well as Abyssinia, is very much overspread with mountains.

THE churches in the mountains of Abyssinia cut out of the solid rock are mentioned by some writers as a great curiosity. It is said they are ten in number, and that an exact proportion is observed in the gates, windows, pillars, arches, and all other parts, so that the whole appears elegant and regular; and it is affirmed they were all perfected within the space of four and twenty years. It is to be observed however, that the rocks, out of which these churches are so curiously hewn, are of a soft nature; and it is not unlikely that some of them had part of their form beforehand, since there are many rocks in this country of different figures, so exact that they seem to have been cut with a chissel. We are told that the workmen employed in this curious performance were sent for from Egypt.

F O S S I L S.

WE have observed that Abyssinia and Nubia abound with mountains, and many of them contain vast treasures of gold in their bowels, as appears by the dust or grains of that metal, which are found here and there as big as a pea; but we do not learn that either gold or silver mines are wrought in those kingdoms, the natives being naturally averse to such hard sort of work, and perhaps thinking it would be folly to take pains to dig

up treasures which might tempt the Turks to invade them. Instead of money, therefore, they make use of a kind of fossil salt, to purchase from strangers such commodities as their country does not afford.

BUT perhaps no part of Ethiopia yields greater plenty of gold than the neighbouring empire of Monomotapa, from whence the Portuguese have given the sovereign of that country the title of the golden emperor. The natives dive to the bottom of their lakes and rivers, and bring up with them the mud and sand, from which they afterwards separate the precious metal. But in the kingdom of Sofala, which is dependent on and by some reckoned a part of the said empire, the mines are so rich, that the inhabitants assert they yield annually above two millions of metigals, each metigal amounting to fourteen livres French money; that the ships from Zidem and other ports of Arabia carry off above two millions a year in time of peace; and that the Portuguese governor of Mosambique, whose office lasts but three years, has three hundred thousand crowns revenue in that time, besides the soldiers pay, and a tribute paid to the king of Portugal. From this plenty of gold some have concluded Sofala to be the land of Ophir, to which Solomon sent fleets from Eziongeber, a port on the Red sea, which returned once in three years, bringing home gold and other commodities to an immense value: but this is mere conjecture, and indeed the most learned authors can go no farther in a matter of such uncertainty.*

IN

* Ophir has been sought for almost in every part of the world, and yet remains a terra incognita; however, it does not

IN Abyſſinia, beſides a great number of ſalt-pits which ſupply that country with much more than is neceſſary for home conſumption, there is on the confines of Dancala and Tigra, two adjacent kingdoms, a large plain of four days journey, one ſide thereof is incruſted all over with a pure white ſalt, and in ſuch quantity that ſome hundreds of camels, mules, and aſſes are conſtantly employed in carrying it to different parts of the neighbouring countries.—In ſome parts of Ethiopia there are whole mountains of ſulphur, beſides divers other foſſils, of which we have already given a ſufficient account in the courſe of this work.

VEGETABLES.

NUBIA affords not only very fine fruit, but variety of medicinal plants, roots and drugs, with others that are extremely obnoxious. One of the moſt remarkable productions of this laſt kind, is an herb not unlike our nettle, which grows in Nubia, and produces a ſeed of ſuch a poiſonous and deſtructive quality, that a tenth part of a grain kills a man in a quarter of an hour, and a whole grain in an inſtant. This deadly product is made a conſiderable branch, not only of their trade, but of the royal revenue, it being ſold by

not ſeem probable that Sofala is the place, becauſe it is not diſtant enough from Ezion-geber, for a fleet to have ſpent three years in the voyage, though we ſhould allow the ſhips went to different ports for different parts of their cargo. Be this as it will, it was chiefly by the trade to Ophir that Solomon came to ſurpaſs all the kings of the earth in riches; for the very firſt voyage they made, they brought back four hundred and fifty talents of gold, excluſive of ſilver and all other valuable commodities; which alone amounts to near two millions and a half of our money, reckoning the talent of gold equivalent to five thouſand four hundred and twenty five pounds ſterling.

the retailer for a hundred ducats an ounce, besides which the buyer must pay the like sum to the king, and take a solemn oath not to make use of it within his dominions: and for this reason it is death for any private person to sell it without the king's permission.

THE trees of Abyssinia are crowned with a constant verdure, and though the inhabitants have a scarcity of fruit, this is said to be rather owing to their negligence; than to any fault of the soil, which is capable of producing as great a plenty and variety of them, as any country in Africa. They cultivate the black grape, peach, sugar-cane, four pomegranate, some oranges and citrons, and several kinds of figs; among others, one called en-fette, grows to a prodigious size. During the greatest part of the year, the banks of the river are adorned with lillies, jonquils, and a prodigious number of flowers unknown in Europe.

SOME writers tell us incredible stories of the plants of Abyssinia; and particularly Tellez mentions one called Amagmagda, which has the virtue of curing broken and shattered bones in a very short time. He likewise mentions the assazoe, which charms and lays serpents and venomous creatures to sleep, and whose root is a certain antidote against the most deadly bite of any poisonous animal. The Indian fig-tree grows plentifully in this country, whose fruit is excellent, and is supposed by Ludolphus to be the dudam of Moses, in our version translated mandrakes, which Rachel is said to have exchanged with her rival sister for a night's lodging with her husband.

THERE is a small tree or rather shrub, growing to the height of three or four feet, with little narrow leaves, and bearing a fruit resembling the seeds of coriander. These berries when ripe, and dried in the sun, shrink like East-India pepper,
turn

turn black and hard, and differ little from it in taste, but are not so hot, and therefore more agreeable. This shrub grows plentifully in many parts both of upper and lower Ethiopia.

IN the same country they have a tree called likonde or alikonde, which delights in a dry soil, and frequently grows to the thickness of eight, ten, or twelve fathoms in the body; but the root never goes above a foot under ground, so that they are easily blown down. Its fruit resembles that of the palm-tree, but is somewhat longer, having a white kernel within it; but the natives never eat it except in time of famine or great scarcity, it being reckoned a dangerous food, causing a sickness which sometimes proves mortal. Of the inner rind they make a sort of cloth, and canoes or boats of the body of the tree.

A N I M A L S.

SEVERAL ancient authors take notice of a fierce kind of wild bulls that are found in Ethiopia, much larger than our tame ones, and which prey upon other animals. Agatharchides, who lived near two hundred years before Christ, is the first who mentions and describes this voracious bull, and Diodorus Siculus, Pliny, and Ælian seem all to have copied his description “There are very
“fierce wild bulls in Ethiopia, (says Pliny) larger
“than tame ones, and swifter than any other
“animal, of a deep yellow colour, with blue eyes,
“and their hair inverted, with a mouth that opens
“to their ears; and moveable horns; their skin
“is as hard as a flint, and invulnerable; and they
“hunt down all other wild beasts.” Diodorus adds, that his eyes shine in the night; that after he has killed other beasts he devours them; and that when he attacks herds of cattle, he is neither
terrified

terrified by the herdsmen nor the number of their dogs. Ludolphus, in his history of Ethiopia, affirms, that there are bulls in that country of an uncommon size, twice as large as those in Hungary and Russia; and the letters of the Jesuits frequently mention the largeness of the Abyssinian oxen. Father Bernier, in his account of the great mogul's country, tells us, that among several presents which two Ethiopian ambassadors presented to Aurengzeb, there was a prodigious large horn of a bull, full of civet, which he measured, and found the basis or thick end six inches in diameter.

FROM these and other authors it appears (says Sir Hans Sloane in the Philosophical Transactions) that there is in Ethiopia, and probably in the midland parts of Africa, where travellers seldom come, a very large animal of the ox kind, at least twice as big as our bulls or oxen, with horns proportionably large, but otherwise differing from them in several respects. The accounts the antients give of this creature are not perhaps without some fabulous additions; and therefore it were to be wished the modern writers who mention it had given us a satisfactory description of it, which none of them have done; unless we suppose it to be the same with the *sukatorio* or *sukotyro*, which Nieuhoff describes to be of the size of a large ox, with a snout like a hog, two long rough ears, and a thick bushy tail: its eyes are placed upright in the head, quite different from other animals; and on the side of the head, near the eyes, stand two long horns, or rather teeth, not quite so thick as those of the elephant.

THE camelopardal is an animal found in some parts of Ethiopia, being so called as partaking both of the camel and the panther. Its legs are so long that a man may stand upright under its belly, and
its

it's neck is long in proportion, in order to reach the ground to graze; so that when the creature walks with it's neck erect, the head appears a great height above it's body. It has a slender tail, two little horns, a small mouth, but a very long tongue, and it's two fore legs are longer than the hinder. The beast loves solitude, keeping continually in the woods; and, if taken young, is exceeding tractable. It's flesh is good meat, and it's skin, which is spotted like a panther, is very valuable.

THE civet-cat is one of the most remarkable animals of Ethiopia. The other quadrupeds found in this part of Africa are lions, tygers, leopards, panthers, elks, porcupines, and many more, which are either so well known as to require no description, or have been taken notice of as we met with them in other countries.

THOSE who have visited Abyssinia mention a very extraordinary animal, which is probably only one of the many species of monkies. This they represent as no bigger than a cat, but as having the face of a man, with a mournful voice. It is said to live upon the trees, where it is brought forth and dies; but is so very wild, that it is impossible to tame it; for when any of them have been caught, in order to bring them up, all the care that can be taken of them will not prevent their pining away till they die.

IN Abyssinia are a great variety of the feathered kind, both wild and tame, and many of those found in Europe are here larger and more beautiful than ours, particularly the partridges, which are said to be as large as our capons. Of these they have several species, as they have also of pigeons and turtle doves. The cardinal received it's name from the Portuguese, on account of the beautiful redness of it's feathers, except those on it's breast,

breast, which resemble the finest black velvet. There is here also the white nightingale, which is a very beautiful bird, that has a tail two spans in length.

AMONG the obnoxious animals, are the serpents and insects; many of the former are so extremely venomous, that their bite is attended with almost instant death, if a remedy be not immediately applied. But no reptiles are capable of doing a hundredth part of the mischief produced by the locusts, which sometimes appear in such thick clouds as to eclipse the light of the sun, and to lay whole provinces desolate.

AMONG the amphibious animals, the crocodile and the hippopotamus, or river horse, are most destructive; but both these we have already described, in treating of the animals of Egypt.

Of the Inhabitants of NUBIA, and the ABYSSINIANS.

THE inhabitants of Nubia are swarthy and small of stature. Those of superior rank, in the heart of the country, are clothed in a vest, without sleeves, but the common people only wrap a piece of linen cloth about them, and the children go quite naked. Persons of quality, however, wear fine loose and long robes of silk or cotton; and those of the women reach to the ground; the last also adorn their hair with rings and other ornaments of gold, silver, and brass, but have nothing on their legs or feet, except sandals.

THE generality of the inhabitants are Mahometans, but are said to have neither modesty, civility, nor religion. Mr. Norden, who proceeded up the Nile a considerable way into Nubia, found them base, treacherous, mean, and avaricious, especially
some

some of the great, who scruple neither threats nor intreaties to obtain the treasures they dare not plunder by open violence. They fight to greater advantage on horseback than on foot, for they are very expert horsemen; but as they poison their weapons, the Turks seldom care to attack them.

A FRENCH physician named Poncet, who passed through this country, in his way to Abyssinia, says, they are subject to a prince, who wears a long robe, embroidered with gold and silver, fastened with a girdle of the finest cotton. On his head he has a turban of the same; but never appears in public, without having his face veiled with silk gauze of various colours. Those strangers who are admitted to pay their homage to him, are obliged to pull off their shoes, and kneeling, to kiss the ground two or three times; nor do his subjects ever appear before him without being barefooted.

THE Abyssinians are generally tall and well shaped; their complexion may be termed black, but some are inclined to the tawny and to a reddish brown. Among them the olive is esteemed the finest complexion; and next to that, the jet black. They have regular and agreeable features, and have neither thick lips, nor flat noses; and their eyes are black, brisk, and lively. They are naturally strong and healthy, and from their temperance in eating live to a good old age. Most of them are so nimble and active, as to climb the tallest tree and steepest rocks, with surprising ease and agility. The women greatly excel those in Europe in strength and sprightliness; they breed easily, are delivered without help, and can take care both of the child and themselves, without the assistance of a nurse. This indeed is common to all

all the women in hot climates, except where they are weakened by a too sedentary life.

THE men of quality wear a fine long vest, either of silk or cotton, tied about their waist with a rich scarf; that of the citizens is much the same, but is only of cotton, they not being allowed to wear silk; nor is their cotton of the same fineness. The common people have only a pair of cotton drawers, and a kind of scarf, with which they loosely cover the rest of their bodies. As to the women, they are allowed to appear as fine as their circumstances will admit, and therefore those of high rank usually dress in the richest silks and brocades; their upper garments are wide and full, not unlike surplices. Their heads and hair are adorned an hundred different ways, and they have rich pendants in their ears; besides, they spare no expence in the ornaments of their necks, which consist of chains and jewels. Indeed both the men and women are extremely curious in the management of their hair, on which they lavish a great deal of butter, to render it smooth and shining. A vanity the more excusable, as none but the emperor is allowed to wear any covering for the head. Their dress is chiefly accommodated to the climate, and therefore, during the heat of summer, their cloaths hang as loose as possible; but, in the cooler seasons, they bring them closer to their bodies; and the rich then appear in handsome vests, open only to the waist, and closed with small buttons. They have small collars, and very long and straight sleeves, gathered at the wrists.

THEY are not so temperate in their drinking as in their food, especially at their feasts. They have excellent mead, honey being very plentiful; some other liquors made of various fruits, and a kind of ale made of barley. Both the men and
women

women are said to be witty and ingenious, extremely inquisitive, and fond of learning. They have neither inns, taverns, nor caravanseras for the entertainment of strangers: the spirit of hospitality, which prevails amongst them, rendering these unnecessary: for, if a traveller stays longer in a village, or camp, than three hours, the whole community are ready to lodge and furnish him with proper necessities for himself, his servants, and cattle, at the public expence. He need only enter the first hut or tent he likes, and reveal his wants to the master of it, who immediately goes and informs the chief person of the place; upon which an ox is ordered to be killed, and so much of it is sent to him as will be sufficient for him and his company, with a proper quantity of bread, liquor, and conveniencies for lodging.

THE people here have no idea of money, but, in purchasing what they want, exchange one commodity for another. Salt, indeed, may be considered as a kind of specie, it being the most common article of trade; and by this they rate the value of every thing else.

THEY forbid marriage between persons in the third and even fourth degree of consanguinity, and esteem it unlawful to have more wives than one at a time; yet those who disobey this law, and have several, suffer only by being deprived of the benefit of the holy communion, and live with them without molestation. They admit of divorces, not only on a breach of conjugal fidelity, but for want of children, disagreement, bodily infirmities, and the like; in which case the women have the same privilege of abrogating the marriage contract with the men. Hence divorces among those of high rank are very frequent. But, with respect to the breach of fidelity on either side, they sometimes compromise

compromise the affair ; for, as both the husband and wife have separate lands and effects, they can make what is esteemed a compensation : but, when this cannot be agreed upon, the women are generally most severely punished ; she is condemned to lose all her goods ; to leave her husband's house in a mean dress ; and to take with her a sewing needle, by which she may earn her livelihood ; and sometimes she is sentenced to be close shaved, except a single lock on the foretop. But the husband may take her again ; or, if he does not, they may both marry. If the husband be the offender, both he, and the partner in his guilt, are liable to be punished ; but they are generally both fined, and what is taken from them, given to the wife.

THE Abyssinian empire appears to have been, from it's first foundation, intirely despotic, both with respect to civil and religious affairs. These princes boast their being descended from Menilekech, the son of Solomon, king of Israel, by the queen of Sheba. They pretend that this princess reigned twenty-five years after her return from Judea, and was succeeded by this son, from whom descended a series of princes, in a direct line to the year 960, when the crown passed into another family, but was afterwards restored to it again. Hence the emperor has the pompous titles of The Beloved of God, Son of the Pillar of Sion, Kinsman to the race of Judah, Son of David and Solomon, and Emperor of the Great and High Ethiopia, &c. He also bears in his arms a lion holding a cross, with the motto in the Ethiopic tongue, The lion of the tribe of Judah is victorious.

THOSE who are admitted to the emperor's presence, fall prostrate before him, and kiss the earth as they approach his person : even in his absence, they never hear his name mentioned without bow-
ing

ing low, and touching the ground with their hand. He is not only accompanied by his own household and guards, which are very numerous, but by all the grandees and officers of the empire, who strive to outvie each other in the greatness and splendor of their retinue, the richness of their dress, and the magnificence of their pavilions. As he chiefly lives in tents, his camp takes up a large space of ground, and makes a very splendid appearance; to which the regular disposition of the streets, and the variety of tents, streamers, and other ornaments, do not a little contribute; the whole appearing like a vast open and regular city, in whose center, or in some eminent part of it, stands the emperor's pavilion, which exceeds all the rest in height, bulk, and grandeur. Next to it are those of the empress and royal family, and then those of the officers of the court; all appearing with a proportionable, though inferior lustre. To these may be added large and stately pavilions, that serve as churches, which are adorned, both within and without, at a great expence. It has also markets, courts of justice, and places where young persons of rank perform a variety of exercises on horseback.

THE Abyssinians maintain that they were converted to Christianity by the eunuch or prime minister of their queen Candace, who, after his conversion by Philip, they say, returned into Ethiopia, and converted his queen. But the discipline of the church was settled in the year 335 by Frumentius, bishop of Axuma, who was sent into Ethiopia by Athanasius. The Abyssinians, however, retain many of the Jewish ceremonies; they circumcise not only male, but female infants; which last is done by cutting off a small piece of skin from the clytoris. They abstain from blood,
things

things strangled, swine's flesh, and other animals prohibited by the Mosaic law. They use purifications and washings after certain defilements, keep the seventh-day sabbath, and oblige a man, if his elder brother dies without male issue, to marry his widow. Their clergy are allowed to marry, and the divine service consists of a set of prayers, psalms, and hymns, suitable to the seasons; and for the most part performed with great decency and devotion. They baptize infants by a three-fold immersion, after which they anoint the whole body with the holy chrism, and afterwards administer the holy communion to the child, in both kinds.

THEY receive the same canonical books of the Old and New Testament that we do; the former being translated from the Septuagint, and the latter from the Greek original. They have also the apostolical constitutions, which, in several respects, differs from the work we have under that title, and which they believe to be of divine authority. They have also the Nicene creed, but not that of the apostles.

THE Abyssinians have few manufactures among them, and though they are chiefly dressed in cotton and linen, and their country is as proper for producing them as any in Africa, they raise no more than will serve their present wants; and the less of either serves them as they use none either at their tables or for their beds. The Jews are said to be their only weavers; and in most parts of the empire they are their only smiths, and work in all kinds of metal. Their potters and makers of horn trumpets, and drinking-cups, are in the highest request; and with other inferior artists, are incorporated into tribes or companies, and have their

their several quarters, the children commonly following the business of their parents. Gold and silver smiths, jewellers, and other artificers of the like kind are intirely unknown there, except by some of their works being brought by way of exchange; and these are only to be found among the great and opulent. The same may be said of their carpets, velvets, brocades, silks, tapestry, and other valuable stuffs, which are all brought hither by the Turks, by the way of the Red sea, and exchanged for fine horses, gold dust and emeralds. The Arabians, Armenians, and Jews are the common brokers between them and the Abyssinians, who seldom or never travel out of their own country; and indeed are not suffered to do so by the Turks, who, being possessed of the sea-ports on the Red sea, enrich themselves by this monopoly, and take great care to prevent any trade being opened into the country, by any other nation. Besides the above articles of commerce, the Turks bring them several kinds of spices; and, among the rest, pepper, in very small quantities, which they keep up at so high a price, that none but the richest of the Abyssinians can purchase this or any other spice. In return for these spices, the Abyssinians bring them honey, wax, ivory, skins, furs, and leather in great quantities; for which they are obliged to take what the brokers please to give them.

C H A P V.

OF CONGO, including the kingdoms of CONGO proper, BENGUELA, and LOANGO.

THESE countries generally included by geographers, under the general name of Congo, extend about twelve hundred miles in length from north to south, along the western coast of Africa; but in no part reach two hundred miles from the sea within land. The climate of Benguela is extremely bad for strangers; and particularly the Europeans settled there, are said to look as if taken out of their graves. The climate of Congo Proper is, however, extremely temperate, considering it's being situated very near the equinoctial. The winter begins in March, when the sun enters the northern signs; and the summer in September, when the sun enters the southern signs; and in this season it never rains; but during five months of the winter, that is in April, May, June, July, and August, they have but few fair days; the rain pouring down with prodigious force, the rivers overflow their banks, and lay all the low lands under water. In winter, the winds blow through all these regions from north to north-west, and from the north to the north-east, driving the clouds towards the mountains with great violence; where being gathered and compressed, they are seen on the tops of those eminences, and soon after discharge themselves in showers. But during their summer, the winds which blow from the south to the south-east, clear the southern skies, by driving the rain into the northern regions. These

These winds cool the air, the heat of which would otherwise be insupportable. But no snow ever falls in these countries, nor is it ever seen on the tops of the mountains, nor is ice in winter ever known.

In the kingdom of Congo are every year two harvests; for they begin to sow in January and reap in April; the second time is in September, and they reap what is then sowed, in December. In the cultivation of the earth, they use neither plough nor spade; for the clouds no sooner begin to afford the least moisture, than the women set fire to the herbs and roots; and, after the first heavy shower has fallen, proceed to turn up the ground with a slight hoe, fixed to a handle about two spans long, cutting into the earth with one hand, while, with the other, they scatter the seed, which they carry in a bag by their sides. While thus employed, they have generally one or more children upon their backs, to prevent their being hurt by the insects, which, upon this occasion, come out of the earth in great numbers.

F O S S I L S.

IN Angola are mines of salt, from which they dig it out in pieces above a yard long, and as clear as crystal. It is as white as our best salt, and has such a peculiar flavour, that a piece of it, put into the pot, gives, both the liquor and meat, a pleasant seasoning.

In many places in the mountains of Congo, are quarries of excellent stone, of various kinds; from whence whole columns of a prodigious size, with their capitals and bases, may be dug intire. There are even said to be whole mountains of jasper, porphyry, and marble of various colours, re-

resembling those called the marbles of Ethiopia, Numidia, and Africa. There is also a stone, speckled with grains and streaks, some of which contain beautiful hyacinths; for the streaks which are disposed like veins, through the body of the marble, may be picked out, like the kernels of a pomegranate, when they fall into grains and little pieces of perfect hyacinths. Beautiful columns may be formed of the whole mass, which is very sparkling. There are other stones, which likewise seem inlaid with copper and other metals; these likewise appear very beautiful, and take a fine polish.

THE mountains of Congo are likewise said to abound with gold, but this is denied by some writers; it is, however, allowed that there are mines of silver and excellent copper, and also some of iron, which are wrought; the usefulness of that metal in making knives, arms, instruments of agriculture, and other kinds of utensils, being well known to the inhabitants. Of the other minerals and fossils of this country we have no account, it being little known to the Europeans, except to the Portuguese.

VEGETABLES.

THERE are several kinds of grain different from ours; one, which the inhabitants call luco, nearly resembles mustard-feed, but is somewhat bigger. It is ground with hand-mills, yields a very white meal, and makes fine well-tasted bread, not at all inferior to that made of wheat. There is also a kind of millet called the corn of Congo, and another sort called Portuguese corn. They have various sorts of pulse, for the most part unknown in Europe; among which is a sort not unlike rice, but grows upon a shrub, and will last two or three years,

years, yielding fruit in great abundance, every six months. Among many other sorts of pulse are the mandois, which grow three or four together underground, like vetches, and are about the thickness of an ordinary olive; from these they extract milk like that drawn from almonds. There is another sort of ground pulse called incube, which is of the size and shape of a musket-ball, and is very wholesome and well-tasted.

THEY make bread of the root of a plant, called by the natives mandiaca, reduced to meal. This plant is of various sorts, which differ in the roots, colour, and quality. The leaves resemble those of the oak, and are of a deep green, with many veins and prickles. The stem shoots upright ten or twelve feet high, spreading into many branches; but the wood is weak like that of the willow. In cultivating this plant, they dig up the earth, beat it small, and throw it into heaps; then lopping off twigs, or taking slips about a foot long, and an inch thick, set two or three in each heap, with the ends sticking out four or five inches above the earth. These instantly take root, and, in about a twelve month's time, grow above twelve feet high, with many branches, and the body as thick as a man's thigh. To make the root grow large, they keep the ground clean by weeding it, and when it is come to it's perfect maturity, cut down the stem close to the earth. The root being afterwards dug up, and the outside taken off, they reduce it to flour, by grinding it in a mill made like the wheel of a waggon. The fellies of the wheel are a span broad, and the bottom covered with copper, set with sharp points, in the manner of a grater; and underneath is a trough, into which the meal falls. The person who holds the root to the wheel is attended by several little boys, and there are slaves

to take the ground meal out of the trough, and dry it in copper pans over the fire. Many houses are built for this work, that are above a hundred feet long, and thirty or forty broad, with ten furnaces on each side. Every husbandman may make as much meal as he thinks fit; and, if he has a house with twenty furnaces, usually employs fifty or sixty slaves, in weeding, hoeing, grinding, and drying.

THERE are, in this country, trees of an amazing size, the chief of which is called by the natives *ensada*, and in some respects resembles the banian tree, which we have already described in treating of India; but in others it seems very different. It commonly springs up with one thick body, to a great height; and at the top shoots forth many branches, from which descend small, yellowish strings, which, on their reaching the ground, take root, and spring up again like new plants; and, increasing in a little time to a large bulk, from thence fall new pendulums, which taking root again, spring up as before; so that a single tree will sometimes extend it's boughs above a thousand paces, forming a wood, large enough for several thousand men to shelter themselves under the branches, which grow so very close, that the sunbeams cannot penetrate them. The leaves of the young boughs resemble those of the quince-tree, they being of a whitish green, and woolly. The fruit, which is red, both within and without, grows between the leaves of the young branches, like a common fig. Under it's outermost bark they find a substance, which being beaten, cleansed and drawn out in length, the common people make into a kind of cloth.

THE mirrone nearly resembles the former, the boughs sending a number of roots to the ground; but

but the leaves are like those of the orange-tree. This is usually planted near the dwellings of the inhabitants.

AMONG the fruit-trees, are citrons, lemons, oranges, guajavas and a great variety of others. There are likewise many that have medicinal virtues; but the most surprising of them all is the mignamigna, which is said to produce poison in one part, and it's antidote in another; for, if any person be poisoned, by the fruit, which resembles a small lemon, he will then be cured by the leaves; and, if he be poisoned by the leaves, he must have recourse either to the fruit, or the wood.

A N I M A L S.

AMONG the animals are the elephant, the rhinoceros, red buffalo, zebra, elks, lions, tygers, leopards, wild boars, bears, wolves, foxes, very large wild cats, catamountains, civet-cats, apes, baboons, cows, sheep, goats of several kinds, fallow-deer, roebucks, hares, and rabbits.

AMONG the animals the dante seems peculiar to this country. It is shaped and coloured much like a bull, some being black, others grey, and others brown; but it's horns, which are blackish, are like those of a he-goat, but very bright and shining; and the natives form them into a great variety of very pretty baubles; they also make use of the raw hide, dried, to cover their shields; it being so tough that no dart, or arrow, can penetrate through it. This animal is said to be exceeding swift of foot; and, when wounded, will follow the smoke or scent of gunpowder with such fury, that the hunters have no other way to avoid it, than by climbing a tree with all possible dispatch; when the wounded dante, finding his enemies out of his reach,

reach, stays at the foot of the tree, till a second or third shot has laid him dead. Their flesh is esteemed delicate food; and both the natives and the wild beasts make continual war upon them: but nature has taught them to guard against the latter, by going in large droves, which, on their being attacked, form themselves into a ring, with their horns outward, with which they defend themselves with surprising vigour and agility.

ANOTHER extraordinary animal is called the nioffi, and is of the bigness of a cat: it is of an ash-colour, and has two small horns on it's head. This is said to be the most fearful creature that lives, it being ever in motion, and starting or running at the least noise or breath of air. It is said, that, when drinking, it swallows a single gulp, it then runs away as if pursued, and with the same fear returns till it has quenched it's thirst. It does the same when browsing on the grass. It's flesh has an exquisite taste, and the natives prefer it's skin to that of any other creature, to make strings of for their bows.

IN treating of India, we described an animal of the ape kind called oranoutang, as approaching nearly to the human race, in it's stature, manner of walking, shape, and sagacity. We shall now treat of the chimpanzee or pigmy, which seems nearly of the same species in every thing but it's size. In the year 1738 (if we are rightly informed) Captain Flower brought over a female pigmy from Angola, which was two feet four inches high, had a face like a man, and was pretty fair, except on the chin, where a few straggling hairs appeared. It's nose was small and like that of an ape, it's mouth about two inches and a half wide, and it's teeth shaped like human teeth, but neither very white nor sound. The hair on it's head was an

an inch or more in length, and it's back parts were pretty hairy; but on it's breast and belly the hair was much thinner. It's feet were intirely bare on the inside, as were also the hands both on the inside and outside.

THIS creature walked erect, was extremely fond of persons it was used to, and even knew how to behave with good manners at the tea-table. It would fetch it's little chair, and sit down as naturally as any of the company; and, if the tea were too hot, would pour it into the saucer to cool; with abundance of such seemingly rational actions, which were diverting and surprising to the spectators. It's food was chiefly potatoes, bread, milk, nuts, apples, and raw onions, which last it greedily devoured, shewing an aversion to all kinds of flesh, except now and then a bit of rabbit or chicken. It lived in England about six months, and, being opened after it's death, it was found to have died of a confirmed jaundice.

THE chimpanzee, dissected many years ago by Dr. Tyson, was also brought from Angola, and measured twenty-six inches from the top of the head to the heel. The thickest part of it's body was sixteen inches round, and the length of the arm was seventeen inches from the shoulder to the end of the fingers. The face of this creature more nearly resembled that of a man, than the face of an ape or a monkey does; and it's head was as big as either of theirs; but the nose was much alike in both. The ears, for size, colour, and structure, were intirely like those of a man, but it had no eye-brows, though hair grew on the eyelids. It's breast was small, and not protuberant; but the two nipples, which were very apparent, were exactly situated as they are in men. It had hair in the arm-pits; and, all behind from the head

downwards, the hair was so thick, as almost to prevent the skin from being seen ; but, in all parts before, it was much thinner. The navel of the chimpanzee is very visible in the exact place, and is in all respects the same as in man : but the palms of it's hands, and the soles of it's feet, are always of an equal length, and longer in proportion than those of men. It's toes are as long as it's fingers, the middlemost toe being longer than the rest ; and the great toe, like the thumb, is set off at a distance from the others.

SEVERAL authors have said, that, in the sea of Angola, and in many other places, is a fish eight spans in length, with the head oval, and the face resembling that of a man. It has an high forehead, small eyes, a flat nose, and large mouth ; but it has neither chin nor ears. It has two arms, which are short, and without elbows, with hands or paws, to each of which are four long fingers, which are not very flexible, connected by a membrane like that of the foot of a goose. Their sex is distinguishable by the parts of generation. The females have breasts to suckle their offspring, the upper part of their body resembling that of the human species, and the lower part that of a fish. Their skin is of a brownish-grey colour, and their intestines resemble those of a hog. Their flesh is as fat as pork, particularly that of the upper parts of their bodies ; and this is a favourite dish with the natives on shore, who broil it. This kind of mermaid makes a lamentable cry, when drawn out of the water. We are told there is a bone in the head that divides the brain, which the Portuguese powder, and say it is of great service in the stone and gravel. Accounts of the catching of these mermen or mermaids, in Europe, are delivered by
Wormius,

Wormius, Guicciardino, Mexia, Seybold, Erasmu, Franciscus, and others.

IN these and the neighbouring kingdoms, are a vast variety of land and sea fowl. Among the latter, are a great number of ostriches of a surprising size. Their feathers, mixed with those of the peacocks, which are here no less numerous, and extremely beautiful, are not only made into very splendid umbrellas, but into standards and ensigns. The king of Angola is said to keep great numbers of the latter, in a wood surrounded with high walls; and to suffer none in his dominions to breed or keep them, on account of his using the feathers in his ensigns.

THERE are here a great variety of parrots, distinguished by their different sizes and colours; particularly a small bird of the parrot kind, little bigger than a sparrow, but of a fine shape, and the most delightful colours. But the most esteemed are the singing birds, which are somewhat larger than the canary bird, and of different colours; some being all over green, others red, and some all white; others grey, dun, or black; these last have the sweetest note.

WITH respect to reptiles, the country is infested with a variety of serpents, some of which are represented as of an enormous size. Thus we are told in the Philosophical Transactions, that, in the kingdom of Congo, there are serpents twenty-five feet long, that will swallow a whole sheep at once. They are killed as they lie basking themselves in the sun; and, after cutting off their heads and tails, and taking out their entrails, the natives eat them, and find them as fat as hogs. There are also rattle-snakes, tree-serpents, vipers, and many reptiles of others kinds, particularly scorpions.

BUILDINGS.

THE houses of the common people, like those in Guinea, are generally no better than round huts, with no windows, nor any light but from the doors, which are usually so low, that the shortest man must stoop to enter them. The houses of the city of St. Salvadore, and some other of their towns, are, however, somewhat higher, better thatched, and white-washed both within and without: these are divided into apartments, the chief of which have their floors matted. Those belonging to persons of rank are still more capacious, and have a kind of hall to receive their visitors in, with distinct apartments for their wives, servants, and slaves, standing like so many huts, either adjoining to each other, or inclosed by a wall. The houses of the Portuguese are commonly built of brick and mortar after the European manner, and are, for the most part, pretty well furnished; but they have never been able to induce the Congoeze to imitate them in building.

THE furniture of the natives chiefly consists of a few ill-contrived instruments of agriculture; a hatchet to fell timber; a cutlass, which they usually carry about them when travelling or going to war; a few calabashes, in which they store their provisions; and their kitchen furniture, consisting of a pot, a kettle, a ladle, a few earthen platters, a hand-mill to grind their corn, &c. Their best bedding is a large coarse sackcloth, filled with straw, leaves, or the like, with a slight covering, and a block of wood for a pillow. The princes and great lords endeavour to imitate the Portuguese in the richness of their furniture; but all

all their finery generally consists in having their floors neatly matted, or covered with a fine carpet, and their mud walls hung with tapestry. Indeed the palaces of some of the chief princes and viceroyes are adorned with large and splendid umbrellas, pictures, looking-glasses, handsome couches, easy chairs, cushions, cabinets, caskets, drinking-glasses, china ware, and wardrobes, filled with rich clothes.

SALVADORE, the capital of the kingdom, is situated upon a very high hill, mostly of solid rock, about two leagues in compass; and is shaded by a variety of fruit-trees, as the palm, lemon, and orange tree. It has a delightful prospect all round, it commanding the neighbouring country on every side, as far as the eye can reach. It is seated almost in the center of the kingdom, by a large plain, well watered and covered with palms, and a great number of cattle. The city, being strongly fortified by nature, has no walls, except on the south side. The houses stand pretty near to each other, most of them belonging to persons of quality, who join such a number of little structures within one inclosure, that they appear like little towns. Those which belong to the inferior people, run in straight lines, forming neat streets that are generally pretty broad.

THE royal palace is a spacious building encompassed with a square wall, and resembles a small city; but the wall that faces the Portuguese quarter, is the only one built of stone and mortar; the other three sides being only of straw, neatly disposed; and the walls of the inner apartments are of the same materials, but covered with hangings or matts, curiously wrought. The inner courts contain gardens and orchards, adorned with alleys, arbours, and pavilions, that make a handsome appearance.

pearance. Here are ten or twelve churches, of which the cathedral and seven others are within the town, and three within the palace. The Jesuits have also a college. That part which is inclosed and called the Portuguese city, is about a mile in compass, and the king's palace is nearly the same.

Of the INHABITANTS of CONGO.

THE original natives are generally black, though some are of a deeper dye than others, for their intermarriages with the Portuguese have made them vary from their native hue; some to a dark brown, others to a blackish red, and others to a kind of olive. Their eyes are of a fine lively black, and their hair black and woolly; but they have neither thick lips, nor flat noses. The common people are clothed, from the waist downwards, with palm-tree cloth; but people of distinction dress like the Portuguese, and wear cloaks, Spanish hats, white jackets of scarlet silk, and leather or velvet slippers. The women of figure also dress like the Portuguese, except their wearing no cloaks. They cover their head with a veil, over which they have a velvet cap adorned with jewels.

THEY, in general, behave with great friendship toward strangers, and are of a mild, courteous, and affable disposition. In conversation, they discover great quickness of parts, and express themselves with such good sense and humour, that persons of the greatest learning take delight in hearing them. But, on the other hand, they are said to be proud, revengeful, and much addicted to poisoning.

THE inhabitants chiefly live upon fruit, grain, roots, and pulse: their usual drink is water, but they

they regale themselves with palm wine. They are fond of entertainments, and usually feast in the evening, when they seat themselves in a ring upon the grass round a large wooden platter; and, if any person whatever happens to be passing by, he or she thrusts into the ring, and has an equal share with the rest. At these entertainments they sing love songs, and play upon several kinds of musical instruments.

WORKING of iron is highly esteemed among them, from a tradition that it's first inventor became afterwards king of Congo; yet it is performed in a very aukward manner. The workman sits on the ground, or at best upon a stone, with an ill-shaped hammer in one hand, a piece of iron in the other, and, instead of an anvil, a flat stone between his legs, upon which he beats and shapes one iron, while his foot is moving a wretched pair of bellows, to heat another. Instead of digging the ore out of the mines, they content themselves with what the heavy rains and torrents bring down in a kind of dirt into the vallies; and, for receiving it, dig holes and trenches. When it is settled at the bottom, and the water taken off, or dried up, they cover the hole with charcoal, and by blowing it, when lighted, purge the metal from it's dross, and melt it into a lump, which they afterwards fabricate in the above manner, performing the whole with so little art, that their scymeters, cutlasses, and points of their lances, darts, and arrows, are ill-shaped and clumsy.

As to their joiners and carpenters, who are there of one trade, their tools consist of an ill-shaped ax, the back of which serves for a hammer; at one end is also a kind of chissel, the other is sharp-pointed like a puncheon, and both are fastened to a wooden handle: The work they produce

duce is clumsy, and, being performed with such awkward tools, is six times as long, before it is finished, as a better hand, with proper tools, would be, in making a more perfect work.

THEIR manner of weaving is no less rude, and yet it is astonishing to see the curious work they perform by the most simple means, and without either loom or shuttle. They only fasten their threads at both ends to pieces of wood laid upon the ground, at an inconsiderable distance; for they never weave a piece of greater length than will serve for one single garment. Having braced the threads of the woof as tight as they can, they conduct the threads across with astonishing patience, as if they were rather darning than weaving; and yet some of them adorn their web with curious works in chequers, diamonds, network, and flowers in different colours, with surprising neatness, considering how it is performed: but an European weaver is able to do as much work in one day, as they in twenty.

THE potters, for want of a wheel, shape their clay by the help of a piece of a gourd, which serves them as a mould; and, instead of a kiln, burn a quantity of straw over and about it.

THE government of Congo is as despotic as any in Africa or Asia, the king being the sole proprietor of all the lands within his dominions, which he bestows upon whom he pleases, on condition of being paid a certain tribute. The kingdom is partly hereditary, and partly elective; but the person chosen must be of the royal blood; but, whether born of a wife or concubine, it is not material, provided he be of the church of Rome; for none else are permitted to be candidates for the crown.

THE

THE Portuguese have no sooner agreed upon a successor, than, all the grandees of the realm being summoned to appear near St. Salvadore, the capital, they proceed in pomp to the cathedral, once a noble structure built by the Portuguese, but since run to decay ; however, on these occasions, an altar is richly adorned, and near it is a splendid throne, on which the bishop, or his vicar, is seated ; and, near the other end of the altar, is a chair of state, on which is seated an officer, who is to declare the person elected, and is furrounded by the candidates, who impatiently wait to know who is chosen ; but, before he makes his proclamation, he rises from his chair, and, kneeling before the altar, makes a prayer, and then, returning to his seat, pronounces a long speech on the duties of a monarch, and the many cares and difficulties that attend the crown ; afterwards observing that he and the other electors, have impartially weighed the merit of the candidates, and have chosen such a one to enjoy the dignity of sovereign. He then steps forward, takes him by the hand, and, bringing him to the bishop, they both kneel before him, while the prelate gives him a short admonition, exhorting him to shew himself a zealous protector of the Christian religion, and an obedient son of the church. The king then takes the usual oaths ; after which the bishop leads him by the hand to the throne erected for him, gives him the royal standard, and places a crown upon his head. Upon which the whole assembly fall prostrate before him, make loud acclamations, which are joined by martial instruments and the firing of artillery. From that time the new king takes the name of one of the kings of Portugal, as all his predecessors have done, ever since the reign of the first Christian king.

WHEN

WHEN the king goes abroad, he is attended by a numerous guard, some of whom are armed with muskets, and others with lances, bows, and arrows ; but they march before him without any regularity ; these are followed by crowds of musicians, next to whom are the officers of the household, followed by the knights of the Holy Cross, an order instituted by the first Christian king of Congo. The king then appears preceded by two young pages ; one bearing a royal shield, covered with a tyger's skin, and the sword of state adorned with precious stones ; the other holds a staff, which has a large knob of silver at each end, and is covered with red velvet. On each side of the king, ride two officers, fanning him with horses tails ; and behind them a third holds, over his head, a large umbrella of red damask, richly fringed and embroidered. He proceeds to mass with much the same pomp.

THOUGH the king is allowed but one wife, yet he may have as many concubines as he pleases ; and these, on entering the palace, are confined during the remainder of their life.

THOUGH Popery has got a footing here, there are in this kingdom no stately cathedrals, patriarchs, archbishoprics, rich abbeys, or well endowed monasteries and convents. Some of the natives are said to embrace the Romish religion, only to ingratiate themselves with the Portuguese, while they retain all their old heathenish superstitions, and privately worship their idols. Others, who have perhaps received more instruction from their living nearer the churches, and under the eyes of the Portuguese, will conform so far to the laws, as to go regularly to mass and confession, and will consent to have but one wife ; but could never be persuaded of the unlawfulness of having as many concubines as they can maintain.

The Mantiger



THE principal commodities, brought by the Portuguese into Congo, are either the produce of Brazil, or the manufactures of Europe; the former consisting chiefly of grain, fruit, plants, and other provisions; and the latter of copper and brass vessels, English cloth, Turkey carpets, light stuffs, made of cotton, linen, and woollen for clothing; tobacco, wine, brandy, and other spirituous liquors; blue earthen ware, rings, and ornaments of gold, silver, brass, and baser metals, coral, glass beads, bugles, and other trinkets. In return for these articles, the Portuguese carry off such a prodigious number of slaves, that some make the annual amount from this kingdom, and some of their other settlements on the same coast, to be fifteen or sixteen thousand.

C H A P. VI.

OF CAFFRARIA and the CAPE OF GOOD HOPE.

CAFFRARIA is an extensive country on the most southern part of Africa, and is particularly famous on account of the Dutch settlement at the Cape of Good Hope, it's extremity to the southward, and the unaccountable manners and customs of the Hottentots, it's original inhabitants. The greatest part of the country about the Cape is filled with rocks and mountains, which, long after this country was discovered by the Europeans, by being only viewed at a distance, were thought to be barren, but their spacious summits are covered with rich pastures, enamelled with a variety of flowers of uncommon beauty and fragrance,

grance, and abound with fine springs flowing in many streams into the vallies. The skirts of the mountains are interspersed with groves that afford excellent wood for inlaying; while the plains and vallies consist of fine meadow lands, which nature has adorned with such a profusion of beauties as to charm the eye of the beholders, and are embellished with the finest trees, plants, and flowers, that fill the air with the sweetest odours.

THE soil is so extremely rich, as to be capable of every kind of culture; it bears almost all sorts of grain, and every kind of fruit trees. The region about the Cape is, however, subject to boisterous winds, which generally blow from the south-east or north-west; for, while the sun is in the southern signs, they hold in the south-east, and, while in the northern signs, in the north-west. In the south-east, they are troublesome and dangerous to the ships coming in; in the north-west, to the ships at anchor; and, frequently blowing in a hurricane, not only endanger the shipping, but do incredible damage to the corn on the ground, and the fruit on the trees. These boisterous winds are, however, of excellent use; for, by purifying the air, and almost continually keeping it in a very brisk agitation, they contribute to the health of the inhabitants, who, when these winds lie still for a week or ten days together, complain of the head-ach and other distempers, which vanish at their return. This country is situated in a temperate climate, where the excesses of heat and cold are seldom known; and the Dutch inhabitants, who are numerous, and who retain their native industry, have stocked it with prodigious plenty of all sorts of fruit and provisions, most of which, either from the equality of the seasons, or the peculiarity of the soil, are more delicious in their kind

kind than can be met with else where; so that by these, and by the excellent water which abounds there, this settlement is the best provided of any in the known world, for the refreshment of seamen after long voyages.

VEGETABLES.

THE vegetables of Caffraria, especially in the countries near the Cape, are extremely numerous. Among those natural to the soil is the aloe, of which there are many sorts; and not a few of them are planted in the delightful gardens belonging to the Dutch East-India company. They are seen in great numbers on the mountains and the clefts of the rocks; and one sort or other is in blossom throughout the year.

THE ananas, or pine-apples, at the Cape, are of the American race, and there are three sorts of them in the Cape colonies; one called jajama, which is the largest and best tasted: the colour on the outside is red and dark yellow; but within it is near a perfect yellow. The other sorts are the bonjama and the jajagna: the apple of these last species is white within, and in taste resembles Rhenish wine. But we shall defer giving a particular description of the anana, till we come to America; however, it will be proper here to observe, that these at the Cape have a certain acrimony, which the Cape Europeans remove by cutting them in slices, and laying them in spring water; and, if after this they are laid in Rhenish wine, with sugar scattered upon them, when they eat deliciously, having much the taste of strawberries. The Cape Europeans preserve pine-apples in sugar.

IN the company's fine garden is a tree of Indian extraction called the quajavo. It's fruit is in the shape

shape of an apple; and, when ripe, is yellow and green, with the inside extremely yellow. It contains a number of white oval seeds, and is a wholesome fruit of an exquisite flavour. In this garden are also figs of various kinds, all of them admirably sweet and good. The choicest and largest, called Pisang figs, grow upon a plant that has no sooner brought them to maturity, than it withers away; and the next year a new plant yielding the same agreeable tribute, springs up from the root. It is remarkable that this plant has no stem, but its leaves, which are from six to seven yards long, and from two to three yards broad, embrace each other from the ground upwards, forming a kind of stem. Its blossom consists of four leaves, which form themselves into a sort of bell. One plant in the proper season produces fifty or more of these delicious purple figs.

THERE are a great number of quince-trees in the Cape colonies, and the fruit is said to be larger and better than the quinces produced in any other part of the world. Of this fruit the Cape Europeans make great advantage, they having several ways of preparing and preserving quinces, which they sell to the ships that touch at the Cape; they also make and sell a great deal of marmalade. In the Cape colonies are likewise many citron-trees, which yield fruit all the year round. Peaches also grow so plentifully at the Cape, that in some seasons the Europeans there have more than they can consume, and therefore throw many of them to the hogs. Some people, however, preserve them for the winter.

THERE are here two sorts of Indian orange-trees, which are larger than any other trees of the same kind; and the fruit, which is much bigger, is spotted like the skin of a tyger. There are here likewise

likewise several sorts of sweet and sour lemon-trees; and in the gardens are walks of them of a great length.

THE pomegranate-trees are much larger here than in any other part of the known world; the fruit is also so large and in such plenty, that it is frequently necessary to prop up the branches, to prevent their being broken down by their weight. There are two sorts of them, one of which has yellow kernels, and the other kernels of a crimson-colour. The kernels of both contain a very pleasant, cooling juice, which is extremely refreshing in hot weather. There are also two sorts of the netted melons, or pompions, which are of the Indian kind, and grow very plentifully in the Cape colonies. In shape and size they nearly resemble our melons, but both are on the outside of a dark green; and, within, the fruit of one sort is of a whitish colour, with white seed; and in the other of a carnation, with black seed. Both sorts are very sweet and juicy; but that with the black seed is esteemed the best; they are extremely comfortable and refreshing in fevers, speedily and very deliciously quenching the thirst.

VINES were transplanted to the cape from the Rhine, from Persia, and many other countries; these are vastly increased, and yield so plentifully, that the Cape Europeans have much more excellent wine than they can drink; and therefore sell a great deal to the ships who touch there.

ANOTHER tree at the Cape is called cripple-wood, and is a dwarf-tree, with very crooked, knotty branches: the leaves are broad, rough, thick, and shaped like those of the apple-tree; and the fruit resembles the pine-apple. The bark, which is thick and wrinkled, is not only used by the tanners,

ners, but the physicians pulverize it, and administer it with success in dysenteries.

THERE are here four sorts of camphire-trees; one transplanted to the Cape from the island of Borneo, which is esteemed much the best: the other three sorts were brought from Japan, China, and Sumatra; they all grow very quick, and to the size of a walnut-tree. The inside of the leaves is of an ash-colour, and the outside of a grass-green; and, on rubbing them with the fingers, they send forth a strong odour, like that of camphire. These trees are so soft and tender that their branches are frequently stripped off by the wind, and sometimes nothing is left standing but the trunk.

THE Indian gold-tree at the Cape, grows about six feet high, and has small leaves nearly of the colour of gold, speckled with red, and are very beautiful. They have particularly a fine effect, when ranged in gardens among other trees. Yet the blossoms are very small, and of a greenish colour, without the least scent.

WE shall conclude this account of the vegetables at the Cape of Good Hope, with the stinkwood-tree, which grows to the size of an oak, and its leaves are three fingers in breadth. It received its name from its filthy scent; for, while it is under the tool, it exhales so nauseous a stench that the workmen can scarcely endure it; but, after some time, this goes intirely off. The wood being beautifully clouded, the Cape Europeans have tables, presses, and several other useful and ornamental pieces of furniture made of it.

A N I M A L S.

THE largest animals at the Cape are the elephant and the rhinoceros, which are there in great

great numbers; buffaloes are also very numerous in the Cape countries: they are larger than those of Europe, and are of a brown red, while the European buffaloes are black. Those of the Cape are well-proportioned, hold their heads aloft, and have their foreheads covered with hard frizzled hair; their horns are, however, short, and bend inwards, so that their points almost meet. Their skin is hard and tough, so that it is difficult to kill them without very good fire-arms; but their flesh is neither so fat nor so tender as that of a common ox. The Cape buffalo is enraged at the sight of red cloth, and at the discharge of a gun near him, in both which cases he roars, stamps, tears up the ground, and runs so furiously at the offending party, as to beat down all opposition. A considerable body of Europeans at the Cape once chased a buffalo, and, having driven him to the water-place, as it is called, near the Cape harbour, the beast turned, and ran furiously at one of his pursuers, who was in a red waistcoat, and who, nimbly skipping aside, ran towards the water, where the buffalo, pursuing him, obliged him to plunge in to save his life. He swam well, and as quick as possible; but the buffalo leaping in after him, pursued him so closely, that he could only save himself by diving. The buffalo, thus losing sight of him, swam towards the opposite shore, which was at three miles distance; and our author observes, that he would undoubtedly have reached it, had he not received a shot from one of the ships in the harbour.

THE zebras of the Cape, which are of the same species with that in the queen's possession, are very beautiful creatures, and are improperly called wild-asses, for they are of the size of an ordinary saddle-horse, and resemble an ass in nothing but the length
of

of their ears. The legs of this fine and well proportioned animal, are slender, and the hair on his body soft and sleek. On the ridge of his back, a black streak extends from his mane to his tail, and on each side are a great many streaks of various colours, that meet under his belly in so many circles; some are white, some yellow, and some of a chesnut-colour; and these colours lose themselves in one another, in a very beautiful manner. His head, ears, mane, and tail, are also streaked with the same variety. He is so swift that, it is said, there is not an horse in the world that can keep up with him.

THE elk of the Cape is very different in it's form from those of Europe, which we have described in treating of the animals of Sweden and Lapland. It is generally five feet high; and it's head, which resembles that of the hart, is small in proportion to it's body. The horns, which are only about a foot long, run up twisting; but the ends are straight, smooth, and pointed: the neck is slender and beautiful, and the legs also slender, and of greath length; the hair of the body, which is of an ash-colour, is smooth and soft, and the tail about a foot long. The flesh, which tastes agreeably, either boiled or roasted, resembles that of good beef. These stately animals are generally found on high mountains, where there are good pasture-grounds, and near some springs. They climb the highest rocks, and pass the most difficult ways with surprising dispatch and security; yet sometimes visit the vallies, and frequently attempt to enter the gardens; whence the inhabitants place traps before those that are most exposed to their inroads. These gardens being usually encompassed with a ditch, over which is a bridge at the entrance, they fix in the ground, at one corner of the bridge, a strong, pliant,

pliant, taper pole, by the broad end; fixing to the small end of it a long rope, by which that end of the pole is pulled down to the other corner of the bridge, where it is fastened so slightly, that by a small touch it is freed, and flies up with great force. When the small end of the pole is thus properly fixed, the remainder of the rope is formed into several nooses and coils, and laid under the arch of the pole. An elk, coming to one of these gardens, and finding no communication but by the bridge before the door, steps upon it through the arch; and, hampering his legs in the coils of the rope, shakes the pole, on which the small end flying up, and fastening him in one of the nooses, he is drawn up, and unable to escape. If by struggling he breaks the pole, it is a hundred to one but he falls into the ditch; and, if he escapes that, he drags a piece of the pole after him, which so embarrasses him in his march, that he is easily taken.

THE hart of the Hottentot countries resembles those of Europe in every thing but it's horns, which are only about a foot long, and have no branches; but run up twisting in the manner of a screw to about half the length; then, turning a little outward, are straight and smooth to the point.

THERE are here goats of many different species, the most remarkable of which are the following: the blue goats are shaped like those of Europe, but are as large as a hart. Their hair, which is very short, is of a fine blue; though, when they are killed, it fades to a bluish grey; their beards are pretty long; and their horns, which are short and very neat, run curiously up in rings till within a little of the point, which is straight and smooth. Spotted goats are sometimes seen in herds of above a thousand in number; and are covered with red, white, and

brown spots; they are rather larger than the blue goats; and their beards, which are of a brown red, are very long. Their legs are well-proportioned to their bodies; and the joints about their fetlocks, are of a dark brown. Their horns, which are about a foot long, incline backwards, running up twisting to the middle, from whence to the end they are very straight and smooth. The young ones are easily taken, and rendered so tame, as to run with flocks of sheep; and their flesh is very agreeable food. There is another sort of goat which has a very beautiful head, adorned with two, smooth, bending, pointed horns, three feet long. A white streak runs from the forehead along the ridge of his back to his tail, and is crossed by three streaks, one over his shoulders; another is on the middle of the back, running down both sides to his belly; the third crosses it above his buttocks, and runs down them. On all the other parts of his body the hair is greyish, with little touches of red; only the belly approaches to white. His beard is grey and pretty long, as are also his legs. The female, which is less than the male, is without horns; and their flesh is also very agreeable food. The Cape rock-goat is seldom bigger than an European kid of a quarter old, and his horns are about half a foot long; as he frequently enters the vineyards and gardens, where he does great mischief, he is narrowly watched, and often taken; and his flesh is esteemed a great dainty. The last we shall mention is called the diving-goat, which is almost as large as an ordinary tame one, and is much of the same colour; but he no sooner sees any person or thing, from which he apprehends danger, than he squats down in the grass; and seeing nothing but grass about him, perhaps imagines himself unseen; for thus he lies, giving

giving now and then a peep out, and drawing his head suddenly down again, till either the danger is past, or he is seized, shot, or knocked on the head.

LIONS are very common at the Cape, where they are extremely large : every limb is expressive of the greatest strength : the firmness of his tread, his dreadful paws, and sparkling eyes, command the attention, and shew his strength superior to that of other animals. Some authors have affirmed that the bones of the lion are not so hard as they have been represented by the ancients ; but Mr. Kolben observes, that the hollow which runs through the shin-bone of a lion, is as small as that which runs through a tobacco-pipe ; and when it is broken to pieces, and the greasiness exhausted by the heat of the sun, these pieces appear as hard, as smooth, and solid as flints ; and serve altogether as well to strike fire with. Indeed, a considerable part of his strength lies in the hardness of his bones ; for, when he comes upon his prey, he knocks it down dead, and never bites till he has given the mortal blow, which he generally accompanies with a terrible roar. When enraged, or pinched with hunger, he erects and shakes his mane, lashing his back and sides with his tail. When thus employed, it is certain death to come in his way : And, as he generally lurks for his prey behind bushes, travellers are sometimes devoured by him ; but if he neither shakes his mane, nor makes any great motion with his tail, a traveller may be fully assured that he shall pass by him in safety. A horse no sooner discovers a lion than he runs full speed ; and, if he has a rider, throws him, if possible, in order to run the faster. When a traveller on horseback discovers a lion, the best method of preservation is instantly to dis-

I 2 mount,

mount, and abandon his horse, which the lion will pursue, without taking notice of him. The flesh of the lion has no ill taste, and eats something like venison.

THE leopard and tyger are of the same nature, and in point of fierceness, next to the lion. The only difference between them at the Cape is in their size, and the figure of their spots. The tyger is much larger than the leopard; and is distinguished by rings of black hair, inclosing spots of yellow; while the black streaks on the leopard are not round, but formed with an opening. The flesh of a tyger or leopard is white, tender, and well-tasted; it is even said to be much finer eating than the best veal, and to have every good quality that can be wished for in meat, and the flesh of the young ones is as tender as that of a chicken.

IN this country are two sorts of wolves, one like those of Europe, and the other called tyger wolves. The latter are of the size of a shepherd's dog, or somewhat larger; and the head broad, like that of an English bull-dog. Its jaws, nose, and eyes are also large, and its hair is frizzled, and spotted like that of a tyger. His feet are large, and armed with strong talons, which he draws in like a cat, and is not heard in his tread; but his tail is short. All day he keeps in clefts of the rocks, or holes in the ground, seeking his prey only in the night, howling most dismally while he is out upon the prowl, which rouses the dogs who keep the flocks: these join together against him, and drive him away; but, if he gets safe into a fold, he generally kills two or three sheep; and having fed heartily upon the spot, carries a carcase away to his den. The lion, tyger, and leopard follow him by his howl, and coming softly near him, suddenly leap upon him, and tear him to pieces.

THERE

THERE are here also wild dogs, which sometimes make great havock among the cattle. They seem a species of hounds, and packs of thirty, and sometimes forty of them, encounter lions, tygers, and other animals; which by their numbers they conquer. They spend the greatest part of the day in the chace, and drag what they kill to a place of rendezvous, where they share it amongst them. Both the Europeans and Hottentots, when they discover these dogs on the chace, follow them to the place of rendezvous, and take what they think proper of what the dogs have killed, which they permit them to do very quietly. The Hottentots eat what they take from the dogs; and what the Europeans take they salt for their slaves. These dogs however sometimes destroy seventy or eighty sheep in one flock.

IN this country is a little creature called a rattle-mouse, though it is larger than an European squirrel, and has a head shaped like that of a bear. The hair on the back is of a liver-colour, but that on the sides is almost black. With it's tail, which is neither very long, nor very hairy, it, from time to time, makes a rattling noise, and thence obtained it's name. It feeds on acorns, nuts, and the like; it purs like a cat, and is mostly seen on trees, leaping from one to another, after the manner of the squirrel. It is so nimble, and bites so close, that it is seldom taken alive.

ONE of the most extraordinary animals of this or any other country is called by the Dutch stinkbingen, or stinkbox; stinking being the grand defence this creature has received from nature against all it's enemies; a defence more effectual than the strongest horns, the sharpest teeth and talons. It is of the shape of a ferret, but as large as a middle-sized dog. When it's pursuer, whether

man or beast, comes pretty near, it pours from it's tail so horrid a stench, that it is impossible to endure it; a man being almost struck down by it before he can get away; and a dog or other animal is so strangely confounded, that he is obliged every minute to stop to rub his nose in the grass, or against a tree. This animal, having thus stopped his pursuer, gets a great way a-head before the chase can be renewed; and, if he comes up with him a second time, he gives him another dose, and by this means escapes again. Thus he proceeds till his pursuer, overpowered by the stink, is obliged to desist. This animal is, however, sometimes shot by the Europeans, but they are obliged to suffer it to lie till it rots; for it is no sooner dead than it's whole body contracts so nauseous a smell, that, if any one does but touch it with his fingers, they retain a stench that can neither be endured, nor easily got off by any kind of washing. Besides these, there are a great number of other animals, particularly wild horses.

AMONG the feathered race at the Cape, there are a vast variety, the most particular of which are the ostriches, of which we have already given a description, in treating of the animals in Turkey in Asia.

THE flamingo is a fine and beautiful bird, larger than the swan; the bill is very broad, and the upper mandible, which is longer than the other, is very crooked, and bends considerably over it. The bill is black at the point, but, every-where else, of a dark blue, and is furnished with sharp teeth. The neck is much longer than that of the swan; and both the head and neck are white as snow; the upper part of the wing feathers are of a high flame colour, and the lower part of them black. The legs are of an orange colour, and half as long again as those of the stork; and the feet resemble

resemble those of the goose. These birds which are here very numerous, keep in the day-time on the lakes and rivers, and at night retire to the hills, where they sleep among the long grafs. Their tongue eats like marrow, and their flesh is well-tasted and wholesome.

THE spoonbill, also called the serpent-eater, is somewhat larger than a full grown goose, which it resembles in it's neck; the bill is broad, long, and straight, ending in somewhat like the bowl of a spoon; the eyes are grey, and the feathers of the tail are about six inches in length. These birds feed upon serpents, toads, frogs, &c. and are of such service in destroying the former, that they are seldom killed.

AMONG the wild fowl is a sort of birds called the knorcock and knorhen. These are a kind of centinels, and give warning to all other birds of the approach of danger; for they no sooner discover a man, than they repeat the cry of crack, crack, very clamorously; and thus frequently disappoint the sportsman; for the other birds no sooner hear them, than they fly quite out of sight. This bird is of the size of a common barn-door fowl; the bill is short and black, as are also the feathers on the crown of the head; but the rest are a motley of red, white, and ash-colour; the wings are small, which prevent it's flying far at once, and the legs are yellow. These birds generally keep in heaths, far from the habitations of men; and their flesh is of an agreeable taste.

THE blue-bird of the Cape is of the size of a sterling; the feathers of the neck and thighs are of a sky blue, and those of the back and wings of a dark blue, approaching to black. The bill, which is between three and four inches long, is pointed, and the under mandible of a dark red. The flesh of this bird is delicate food.

AMONG the several kinds of wood-peckers, is a beautiful bird called the green-peak, it being all over green, except a red spot on the head, and another on the breast. It feeds on small insects, which it picks from the bark of trees.

THERE is here a little bird called by the Cape Europeans the long tongue; it is somewhat larger than the goldfinch, with yellow feathers on the belly, and the rest speckled. The tongue, which nature has given it for it's defence, is not only long and pointed, but as hard as iron, and as sharp as the point of a needle; therefore, when any person endeavours to seize this little animal, it makes use of it's tongue to prick and wound him. It's claws are pretty long, and it's feet like those of the nightingale. It's flesh is well-tasted and wholesome

THE honeyeaters, or gnatsnappers, live intirely on honey, bees, gnats, and flies; their bill is red, long, straight, and very strong. On the upper part of the breast, the feathers are of a deep azure, and those on the lower part of a pale blue: the wings and tail feathers are black, as are also their legs, which are very long. These birds are a sort of guides to the Hottentots in their searching for honey, which the bees deposit in the clifts of the rocks. Besides these, there are a great variety of other fowl, as wild peacocks, pheasants, quails, ducks, turkeys, &c.

THERE are here many kinds of snakes or serpents, some of which are extremely venomous.

THE dipsas, or thirst-serpent, receives it's name from it's bite causing a burning thirst. It is frequently to be met with in the Cape countries, and is about three quarters of a yard in length; has a broad neck, and a blackish back. It is very nimble in it's assaults, and it's bite soon inflames the

the blood, causing a most dreadful thirst Mr. Kolben observes that he knew a man at the Cape, who, on his being bitten by this serpent in the calf of his leg, instantly tied his garter very tight above the knee; and above the garter tied some other thing he had at hand, to stop the course of the poison upwards; and then hastened as quick as possible to the nearest house, which belonged to a smith, with whom he was acquainted; but, before he got thither, his leg was much swelled, and he became extremely thirsty. He impatiently asked the smith for water to drink, and at the same time told him what had happened; but the smith who was acquainted with the nature of the poison, and the manner of cure, would not suffer him to drink a drop; but told him he must immediately consent to have his swelled leg laid open. He submitted; and, on opening the leg, there issued out a great deal of a watery yellow humour. The smith then prepared a pretty large plaister, and bound it over the incision, advising him to refrain from drinking for a quarter of an hour. He did so, and in that time his thirst was considerably abated, and the plaister had drawn a great deal more of the yellow humour; and, being cleaned, was put on again. The swelling was, by this time, considerably abated, and the patient not only grew easy, but was soon perfectly cured.

THE tree-serpent is thus named, from it's being generally seen in trees. It is about two yards long, and three quarters of an inch in thickness, and, by winding itself about the branches of trees, remains for a long time without motion; it being so like the branch it covers, that one, who has not a very good eye, or some knowledge of this reptile, would be mistaken: all the difference, in point of colour, consists in it's being a little speck-

led. If a person stands near the side on which it is lodged, it darts it's head at his face, and sometimes wounds him; which it has no sooner done, than, drawing back it's head, it turns about, in order to descend from the tree, by winding from one part to another; but is so slow that it is easy to kill it before it reaches the ground.

THE hair-serpent of the Cape is about a yard long, and three quarters of an inch thick; but, though so small, it's poison is reckoned more malignant than that of most others, it's bite causing instant death, unless an antidote be immediately applied. The most effectual remedy is the serpent-stone brought from India, of which we have given a particular account in treating of Indostan.

ONE species of snakes is called by the Dutch house-serpents; and are from an inch and a quarter to an inch and a half in thickness; and about a yard in length. They are not only fond of being in houses, but of getting into people's beds, and lying with them all night. They will slip through the hands like eels; and, when you drive them out of bed, use them as you will, if you do not quite disable them, they will get into bed again. When they are offended they bite, but, happily, their bite is not poisonous, nor attended with any ill consequence.

SCORPIONS are here so numerous, that the Cape Europeans are very cautious of handling heaps of stones, where they generally harbour, for fear of being stung by them. There are here also a few of the centipedes, which are red and white, and about a finger's length, but scarce half so thick: they are downy like the caterpillar, and have two horns. Their bite is as dangerous as that of the scorpion; but the application of
roasted

roasted onions to the wound is an effectual remedy. Among the spiders are many sorts ; but one, no bigger than a pea, is very dangerous. It is of a black colour, and very active, it fastening on the walls or cielings of houses ; and, in the fields, fixes it's web in the grafs. It's bite is so poisonous, that it causes death, unless a remedy be applied in time.

AMONG the fish in the sea and rivers at the Cape of Good Hope, are a vast variety, unknown in other places, besides most of those found in Europe ; but we shall only mention those that appear most extraordinary. Among these is the torpedo, of which we have lately given a full description.

THE gold-fish is of a very different kind from that of China, and received it's name from a circle of a gold colour about each eye, and a streak of the same colour from the head, along the ridge of the back to the tail. It is about a foot and a half long, and a pound weight. The teeth are small, but very sharp, and do good execution upon muscles and other fish. The colour of the meat is a mixture of white and red ; and it is not only esteemed very wholesome, but a great cleanser of the blood.

THE Cape silver-fish is of a very white colour, adorned with several streaks that resemble bright silver, falling from the ridge of the back, down both sides ; and the tail seems covered with silver. It is of the shape and taste of a carp, has small sharp teeth, and weighs about a pound. Both these, and the gold-fish, appear in the sea only at certain times, when they come in shoals, and great numbers of them are caught.

THE bennet is a very beautiful fish, of which there is great plenty. It is covered with large scales of a bright purple, intermixed with streaks of gold. The eyes are red, the mouth small, and

and without teeth; and near the gills are two gold-coloured fins; but the other fins are of a light yellow. The tail is reddish, and in the form of an open pair of scissars. The scales seem transparent, as does likewise the skin; but, when the scales are off, the skin is of a bright purple. It is of the length and thickness of a man's arm, and weighs from six to eight pounds. The meat is of a crimson colour, and is divided into several parts by a sort of membranous substance interwoven with it. It is agreeable to the palate, and easy of digestion.

THE sea about the Cape abounds with a very fine fish called by the Cape Europeans the stone-brassem. Of these there are several sorts; one is shaped like a carp, but is much finer eating, and weighs from two to eight pounds. They are of different colours, but their backs are brown; some have several brown streaks falling on both sides from the back to the belly, which add not a little to the beauty of the scales, which, on the belly, are large and white. A species of these fish have the name of red stone-brassem; the skin and scales being red, speckled with blue; and in the middle of the fish, with gold-colour. The belly is of a pale green; the eyes are large and red, with a silver circle about each. The mouth is small, and, as it were, under the gullet, and is furnished with little sharp teeth. These fish are called Jacob Everffons*. This fish is of a delicate

* The reason of these fish being called Jacob Everffons is given by Francis, and is allowed at the Cape to be strictly true. "There was many years ago, says he, a master of a ship at the Cape, whose name was Jacob Everffon; he had a very red face, and was so deep-pitted with the small-pox, that

cate taste, and is very wholesome, nourishing food. There is a species of them, which differ from these last described, in their being larger, in their having shorter mouths, and the out-parts of the gullet of a deep red.

AMONG the shell-fish at the Cape, the sea porcupine snail appears worthy of notice. It has many beautiful colours, and is armed almost in every part with long prickles, which stand out much after the same manner as the raised quills of the porcupine. Sea suns and sea stars are also driven ashore by the tide: their shells are multangular, approaching to a globular form; but the sea sun is the smallest, and it's shells nearly resemble a globe. The shells of both are also covered with a thick, scaly skin, and have small

“ that his beard, which was black, could never be shaved so
 “ close, but that several hairs would remain in the pock-
 “ frets: so that his face, when it was shaved, had the colour,
 “ and seemed to have the specks of the red stone-brassem.
 “ This Jacob being once a fishing with his crew for red
 “ stone-brassem, at Maurice island, beyond the Cape, and
 “ the crew dining that day very joyfully upon this sort of
 “ fish, one of them took it in his head, in a fit of mirth,
 “ to call it the Jacob Eversson. The crew was struck with
 “ the brightness of the allusion, and received it with the
 “ highest agitations of mirth, and with thunders of applause;
 “ and, when they got back to the Cape, they immediately
 “ published this new name for the red stone-brassem. The
 “ settlers (among whom Jacob was very well known) were as
 “ much struck, as the crew, with the justness of the name, and
 “ very merrily agreed to call a red stone-brassem a Jacob
 “ Eversson ever after. Every one that knew Jacob being
 “ ravished with the mirth in the allusion, this new name for
 “ the red stone-brassem, together with the reason of it's
 “ assignment, soon after reached several settlements in the
 “ Indies; and was so well received there, that red stone-
 “ brassens (of which the Indian seas furnish plenty) have
 “ gone there by the name of Jacob Everssons ever since.”

prickles

prickles upon them, shooting out every way like beams of light, whence they receive their names; but the prickles on the sea funs are longer than those of the sea stars. There is here also that beautiful shell-fish called the nautilus, of which we shall give an account in treating of America, and shall here only add, that here is a very extraordinary shell-fish, called by the Cape Europeans the pagger: it is covered with dark brown scales, spotted with red and black; but on the back of it, near the head, has a mischievous kind of horn or prickle, of a poisonous nature, which is apt to wound the hand that touches it; in which case it causes a most acute pain and inflammation, and without speedy assistance the hand perishes.

Of the H O T T E N T O T S.

MANY have attempted to describe these people, who never staid a week at the Cape; and therefore it is no wonder that the accounts given of them are very different. We shall take what we have to say on this subject from Mr. Kolben, secretary to baron Van Krosick, privy-counsellor to the king of Prussia, who sent our author to the Cape of Good Hope, to make observations on the appearance of the heavenly bodies, and who staid there several years.

MOST of the men are from five to six feet high, but the women a great deal less; both sexes are very erect and well-made, there not being a crooked limb, or any other deformity, to be seen among them. As their heads are generally large, their eyes are so in proportion; and their aspect has something sweet and composed, expressive of the utmost benevolence. Their worst features are their large, flat noses, and thick lips; but the flatness of the
nose

nose is not natural; but caused by art. Their teeth are as white as ivory; and their cheeks have something of the cherry; but, from their continual daubings, it is generally concealed. The men have large, broad feet; but those of the women are small; and neither sex cut the nails either of their fingers or toes. But, what is very extraordinary, all authors agree in observing, that every Hottentot woman is distinguished by having a broad callous kind of flap growing to their bellies, which seems intended by nature to hide what civilized nations are taught most carefully to conceal*; and some of them are said to have it so large, that it is often seen below the sheep's skin they wear before them.

THE Hottentots are universally allowed to be a very nasty people; this is chiefly occasioned by the custom of smearing their bodies and apparel with mutton fat, butter, or marrow, mixed with the soot that gathers round their boiling pots, in order to make them look black, they being naturally of a nut or olive colour. This custom they repeat as often as the grease is dried up by the dust or sun, and the indigent are usually obliged to make use of that which is rank; but the more wealthy always besmear themselves with the freshest and choicest that can be had. Every part of the body, from the crown of the head to the sole of the foot, is thoroughly daubed with this filthy paint; and the richer they are, the more fat and butter they use†: but they have an extreme aversion

* Thevenot, in his Travels, says, the negroes, Egyptians, and the women of some other nations, are subject to the like excrescence, but stop the growth of it very early, by searing it with a hot iron.

† It is worthy of observation that the custom of rubbing and greasing the skin is observed by almost all uncivilized nations;

aversion to the fat of fish. What renders them still more disagreeable is their suffering their woolly hair to be matted together with fat and dirt, which renders them abominably lousy, and gives them a very offensive smell.

WITH respect to their dress, the men have no other covering for the head than this composition of fat and soot, which, they say, keeps their heads cool, under the hottest rays of the sun; but, in cold and wet weather, they wear caps, made of cat or lamb skins, tied on with strings. The mantles they hang over their shoulders, which they call crosses, are worn open or closed according to the season. Those of the most wealthy are of the skins of tygers or wild cats; and those of the common people of sheep-skins. These they wear all the year round, in summer turning the hairy side outward, and, in winter, turning it inward: they lie upon them in the night, and, when they die, are tied up in them, when put into their graves. When they wear these mantles open, you see the fore part of their bodies naked to the bottom of the belly, where they are covered with a square piece of the skin of a wild beast, tied round the waist with the hairy side outward.

nations; and, however absurd and ridiculous it may appear to us, there is no doubt of it's being attended with some considerable advantages. It has in particular a natural tendency to promote the suppleness of the joints; and thence the Hot-entots, though a lazy race, are perhaps the swiftest of foot, of any people upon earth; for they, not only dart away from the swiftest European, but some of them will out-run the fleetest horse. Besides, by their living almost naked, they, by their thus closing the pores with grease, prevent that excessive perspiration which would otherwise exhaust their spirits, and enervate their bodies. Another advantage is it's preserving them from being bit by the muscatoes and other insects.

When

When they drive their herds to pasture, they put on a kind of leather stockings, to secure their legs from being scratched by the thorns and briars; and, when they are to pass over rocks, they wear a kind of sandals, made of the raw hide of an elephant or an ox, each consisting of one piece, turning up about half an inch round the foot, with the hairy side outward, and fastened on with strings. The men also generally wear three rings of ivory upon the left arm, which they form from the elephants' teeth they find in the woods, and finish with such art as would surprise an European turner. These rings serve them as guards when they fight an enemy; but when they travel, they fasten to them a bag, in which they carry their provisions. The Hottentot has also a little bag round his neck, in which he carries his pipe and tobacco.

THE women wear caps all the year round, made of the skins of wild beasts, pointing up spirally from the crown of the head. They generally wear two mantles round their shoulders, which, like those of the men, cover their backs, and sometimes reach down to their hams. Between them they fasten a sucking child, if they have one, with the head just peeping over their shoulders. They cover their posteriors with a skin, which generally reaches below the hams; and have another before, which is always of sheep-skin, stripped of the wool. About their neck they constantly wear a leather bag, which contains some kind of food, a pipe, tobacco, &c. The girls, till twelve years of age, wear rings of bull-rushes from their knees down to their ancles. These are then laid aside, and their place is supplied with rings of the thickness of the little finger, made of slips of sheep or calf skin, from which

which the hair is finged. Some women have above a hundred of these rings upon each leg, so curiously joined that they seem like neat pieces of turnery. They are as smooth and as hard as wood, and, when they dance, make a clattering noise. As the women every day walk through the bushes, and brambles, to gather roots and other things for food, these rings preserve their legs from being torn by them; they are also esteemed very ornamental; and, if at any time they are almost famished with hunger, they pull them off, bruise them between two stones, and then broil and eat them. But the principal part of their finery consists in strings of glass beads, brass buttons and plates, which they hang round their necks and their waists, and form into bracelets for their arms. It is likewise an invariable custom, among the men of distinguished valour, to wear a bladder of some wild beast they have slain, blown up and fastened to their hair, where they hang as honourable trophies of their courage. But, with this finery, the men and women are not completely dressed, unless their heads are lavishly powdered with a pulverized herb called buchu. The women likewise paint their faces with a red earth, making a spot over each eye, one upon the nose, one upon each cheek, and one upon the chin. The men usually carry in their hand a small stick, about a foot long, to which is fastened the tail of a wild cat, fox, or other beast that has a bushy tail; and this serves as an handkerchief to rub the sweat off their faces, wipe their noses, and clear away the dust and dirt that gathers about their eyes; and this they clean by plunging and tossing it about in the water.

SOME authors have represented the Hottentots as being void of understanding, and as scarce possessing

fessing the least glimpse of reason and humanity ; but this is intirely false : for the learned Mr. Kolben observes, that he has known many of them, who understood Dutch, French, and Portuguese, to a degree of perfection ; and one in particular, who learned English and Portuguese, in a very short time ; and was said by good judges to understand and speak them, with a surprising readiness and propriety. They are esteemed, at the Cape, the most faithful servants in the world ; and though they are excessively fond of tobacco, cutlery-ware, wine, and brandy ; and will at any time part with the most valuable things they have, to purchase them ; they will neither diminish them themselves, when committed to their care, nor suffer any one else to do it. Their care and fidelity on these occasions is surprising ; and they are even employed by the Dutch in affairs that require great judgment and capacity. They are also distinguished by their humanity, and no people are more generous and more ready to perform acts of kindness, when it is in their power. But they seem to place human happiness in sloth and indolence ; and, though they can think to the purpose, they never exert their mental powers, but in cases of necessity, that is, to remove some pressing want of their own, or their friends. If not roused by any present appetite or necessity, the Hottentot is as deaf to thought and action as a log ; but, when thus urged, he is all activity. They behave with great regard to decency, and nothing passes between them before company that is shocking to modesty. They are never seen to ease nature ; and, if an European takes the liberty to fart before them, they make no scruple of telling him that he ought to be ashamed.

THE

THE Hottentots have been represented as having no notion of a God, a Providence, or a Future State: but Mr. Kolben, after a long acquaintance with them, found that they believe a Supreme Being, who does no-body any hurt, and dwells far above the moon. They look upon the moon as an inferior deity, and assemble constantly to worship her at full and change, believing her to have the disposal of the weather. They likewise worship an evil deity, whom they look upon as the father of all mischief, who stirs up enemies against them, frustrates all their good designs, afflicts them and their cattle with diseases, and sets on wild beasts to devour them. There is also a kind of insect which they adore as a benign deity; and they pay a sort of religious veneration to their departed saints and men of renown. They consecrate woods, mountains, fields, and rivers to their memory; and, when they pass by any of these places, they stop to contemplate the virtues of the deceased, and to implore his protection for them and their cattle.

THE provisions of the Hottentots consist not only of the flesh and entrails of cattle, and of certain wild beasts, but of fruit and roots. They seldom kill any cattle for their own eating, except upon solemn occasions; but, like the Chinese, eat those that die naturally. The women furnish their tables with fruit, roots, and milk; and when they are not contented with these, they go a hunting; or, if they live near the sea, a fishing. They have no set time for their meals, but eat as humour or appetite invites. It is remarkable that they carefully abstain from certain provisions; thus swine's flesh and fish that have no scales, are forbidden to both sexes. The eating of hares and rabbits is forbidden to the men, but not to the women.

women. The blood of beasts, and the flesh of the mole, are forbidden to the women, but not to the men. When among themselves, they never eat salt, nor season their provisions with any kind of spice; yet they are fond of the high-seasoned food of the Europeans, but find by experience that it is very prejudicial to them.

It has been asserted that all the Hottentots, without exception, devour the entrails of beasts, with their filth and excrements, but half broiled; and that, whether sound or rotten, they look upon them as the greatest dainties; but Mr. Kolben, who took every opportunity to observe their manner of preparing and eating their food, always found, that, when they had entrails to eat, they turned and stripped them of their filth, washed them in clean water, and then boiled them in the blood of the beast, if they had any; if not, they gave them a thorough broiling. They are so nasty, indeed, in doing this, as to make an European abhor the victuals: but it is to be observed, that they usually feed on roots, herbs, and fruits; and that their drink is milk and water.

BOTH the men and the women are so extravagantly fond of smoking tobacco, that, when they have no other means of procuring it, they will perform a hard day's work for half an ounce; and, when they get it, will hug it in a transport of joy. They will, therefore, never enter into the service of an European, except tobacco be made a part of their wages; and they always insist upon having a certain allowance of it every day; but, if the quantity agreed upon be only one day withheld from them, they become intractable, and, upon receiving the same treatment the day after, demand their other wages, they being very unwilling to strike another stroke for such a master.

ter. The Hottentots are likewise extremely fond of a plant called dacha, which they say banishes care and anxiety, like wine and brandy, inspiring them with a thousand delightful fancies; and this they frequently smoke, mixed with tobacco. They have also a root called kanna, which is so highly esteemed for its great virtues, that they almost adore it; and its value is enhanced by its scarcity. They consider it as the greatest chearer of the spirits, and the noblest restorative in the world; and any of them will run twenty miles, upon an errand, for a small bit of it. We are informed by Mr. Kolben, that he distributed a bit of this root, no bigger than his finger, in small chips, to several Hottentot families near which he resided; and so gained their hearts by these little presents, that, from that time till the time he left them, they sought all opportunities to oblige him. Several authors have supposed this to be the same with the gingseng of the Chinese.

THE huts of the Hottentots are built with slender poles, bent like arches, and covered with mats, made of bull-rushes, dried in the sun, and wrought so close, that the work is not to be penetrated by the rain. Their form is oval, their longest diameter being generally about fourteen feet, and the shortest about ten. Those of the better sort have two coverings, the one made of mats, the other of skins, which not only keep out the rain, but the excessive heat. They have no light but what comes in at the entrance, which is an arch about three feet high and two broad; on the top whereof is hung a skin, to be taken up or let down at pleasure: their furniture consists of little more than their mantles, which serve them to lie on; some other skins of the wild beasts they have killed, a pot to boil their meat in, one or two for drinking, some

some earthen vessels for milk and butter, their bows, arrows, and other arms, and perhaps some other trifling utensils.

A NUMBER of these huts ranged in a circle, with an open area in the middle, makes one of their kraals or villages, each of which has a court for the administration of justice. This court consists of the captain and the head of each family, who try and determine, by a majority of voices, both civil and criminal causes. Murder, adultery, and robbery, they punish with death; and, if the offender is convicted, he is executed on the spot, the captain giving him the first blow with his truncheon, and the rest of the judges following his example till they have beaten him to death; which done, he is wrapped up in his mantle and buried. The family of the criminal however suffers nothing either in privilege or property, nor are they reproached with the memory of his crime, but treated with the same respect and distinction as if no such misfortune had happened.

EACH village has its physician, and sometimes two, who are chosen by the inhabitants, and do their duty without fee or reward, the honour of the employment being thought a sufficient recompence for their trouble. The Hottentots put great trust in the abilities of these doctors, taking their medicines and submitting to their operations with the utmost readiness; and indeed their practice is attended with wonderful success: But they are not every day called to it, the Hottentots being a stout hearty people, rarely troubled with distempers. If a patient dies under their hands, they always assert that their remedies have been rendered ineffectual by witchcraft, and this the people always believe.

THERE

THERE is another officer called furi, or master, who, like the physician, is elected by the people, and performs his office without revenue or perquisite. Mr. Kolben calls him the priest, as having the ordering of the marriage and funeral ceremonies, and of all that relate to their offerings and worship. He is the operator in the custom, that prevails among the Hottentots, of depriving the males of one testicle, at eight, or twelve years of age, which he does with a great deal of skill and dexterity; and also dresses and sews up the wound, after having deposited, in the scrotum, a little ball of sheep's fat, mixed with the powders of salutary herbs.

EVERY Hottentot nation has a chief, whose office is to command the army, and preside in their councils; and, without his consent, they neither make peace nor war. In these councils, which consist of the captains of the several kraals, he sits in the middle, and the captains round him in a circle; and since the establishment of the Dutch at the Cape, he is distinguished by a brass crown, which he wears at the head of the army, in council, and on every solemn occasion. This ornament the Dutch made a present of to the chief of every nation in alliance with them; whereas anciently they were only distinguished by the superior beauty of their apparel. The chief has nothing allowed him by the public, either for the reward of his labours, or the support of his dignity; but his person is always held in great veneration. Under him, in time of war, the captains command the troops furnished by their respective kraals; and they are distinguished by carrying a cane with a large brass head, which is also presented them by the Dutch.

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WE have already mentioned their not being void of understanding, and their government is no small proof of it. They are also expert in several arts, which shew a great degree of ingenuity; thus with surprising dexterity they cut out the hide of a beast, in an even strap, many yards in length; and form handsome earthen pots of the mould of ant-hills, in which the bruised eggs form a surprising cement. These pots are as black as jet, and of extraordinary firmness. The bone of a bird serves them for an awl; split sinews, or the veins of the back bones of cattle, dried in the sun, serve them for thread. They have a method of tanning hides, and point their weapons with iron, which they even draw from the ore; for this purpose they dig a hole in a raised ground, and, at about a foot and a half on the descent from it, make another of less extent, to receive the melted iron, which is to run into it, through a channel made from the bottom of the upper hole. In the first hole they kindle a fire, and when the earth about it is sufficiently heated, put in the iron stone, and make a large fire over it, which they supply with fuel, till the iron runs into the receiver. When the iron is cold, they take it out, heat it in other fires, and, laying it upon one stone, beat it with another, and thus form their weapons; after which they grind and polish them so neatly upon a flat stone, as to render them valuable both for their use and beauty. This ingenuity is not inconsistent with their habitual indolence; for a poor Hottentot, having made a set of arms for his own use, and another for sale, to a rich one, by which means he procures two or three cows, can hardly be induced to apply himself again to the same labour.

THEIR dexterity in discharging an arrow, and throwing what they call the hassagaye and rackum-stick, is very surprising. One of their arrows consists of a small tapering stick or cane of about a foot and a half in length, pointed with a small thin piece of iron bearded, and joined to the stick or cane by a barrel. Their bows are made of olive or iron wood; and the strings, of the sinews or guts of beasts, fastened to a strong wooden or iron hook at each end of the bow. The quiver is a long narrow bag, made of the skin of an ox, elk, or elephant, and slung over the shoulder by a strap fastened to it; but to the upper end of the quiver is fixed a hook, on which the bow is hung, when they go to war, or to the chase. The hassagaye is a kind of a half pike; the shaft is a taper stick of the length and thickness of a rake handle, armed at the thickest end with a little thin iron plate, tapering to a point, and very sharp on the edges. The rackum-stick is a kind of dart, little more than a foot long, made of hard wood. In the use of these weapons they shew such quickness of the eye, and sureness of hand, as no people upon earth, perhaps, besides themselves, can boast. If a Hottentot sees a hare, deer, or wild goat, within thirty or forty yards of him, away flies the rackum-stick, and down falls the animal. They are no less expert in the use of the bow and arrow; for, if there be no wind, they will hit a mark of the size of a silver penny, at a considerable distance. They are equally expert in slinging a stone, and throwing the hassagaye. In all these cases, instead of standing still to take their aim, they skip from side to side, and brandish and whirl the weapon about in such a manner, that the whole seems an idle flourish; but, on a sudden, away

away it flies to the mark. In short, their dexterity, on these occasions, is inconceivable.

WHEN a whole village are out upon the chase, and discovers a wild beast of a considerable size, they endeavour to surround him, which they generally, do in a short time, even though the beast takes to his heels. If they thus encompass an elephant or a rhinoceros, they attack him with hassagayes, the hardness and thickness of his hide being proof against a shower of arrows. If they do not lay him dead upon the spot, and he is able to return the attack, they form as large a ring as they can make, so as to reach him with their hassagayes. The creature, being wounded, runs with great noise and fury at the persons who threw the weapons. Then others attacks him in the rear. He turns about to attack the last assailants, and is again attacked in the rear. Again he turns about, and is again attacked. The hassagayes multiply upon his body. He roars, tears up the ground, and has sometimes as it were a forest of hassagayes upon his back before he falls.

WHEN a lion, tyger, or leopard, is thus encompassed, they attack him both with hassagayes and arrows. With flaming eyes and the wildest rage he flies upon those who discharged them. He is nimble, they are nimbler, and avoid him with astonishing dexterity, till they are relieved by others. He leaps towards one so quick, and, as you would think, with so sure a paw, that you shudder for the fellow, expecting to see him in an instant torn to pieces; but the man in danger leaps away in the twinkling of an eye, and the beast spends all his rage upon the ground. He turns and leaps towards another, and another, and another; but still in vain: they avoid him with the quickness of thought, and still he fights only with the air. All

this time the arrows and hassagayes are showering upon him in the rear. He grows mad with pain, and, running and leaping from one party of his enemies to another, and tumbling from time to time to break the arrows and hassagayes that are fastened in him, he foams, yells, and roars in the most terrible manner. Nothing in the world can be more admirable than the activity and address with which the Hottentots escape the paws of the beast, and the incredible speed and resolution with which they relieve each other. If the beast is not quickly slain, he is soon convinced that there is no dealing with so nimble an enemy ; and then he makes off with his utmost speed ; but, having by this time a multitude of arrows and hassagayes on his back, some of which are commonly poisoned, he soon falls.

AN unnatural custom prevails among the Hottentots, that when a woman bears twins, if they are both girls, she exposes one, and nurses the other ; and, if she have a boy and girl, the boy is brought up, and the girl exposed ; but, if they have two sons at a birth, they preserve both, and make great feasting and merriment on that occasion. The child to be exposed is either shut up in some cave, left in some thicket, or tied to a tree, where it is either starved to death, or devoured by wild beasts : And the pretence for this barbarous custom is either poverty, or that the woman has not milk enough for both the children.

THE barbarous and unnatural custom of exposing infants still also subsists among the Chinese, who pride themselves on their politeness, as it did formerly among the ancient Greeks and Romans ; and it's abolition is one of the many happy effects that has been produced by the Christian Religion humanising the mind, and adding vigour to all it's tender and humane sensations. To

To conclude this account of the Hottentots, we shall only add another of their customs equally cruel with the former, viz. that of exposing their aged parents. When a father of a family is become quite superannuated and useless, he is obliged, it seems, to resign his stock of cattle, and whatever else he has in the world, to his eldest son, or to his next male heir: Which done, the heir erects a tent or hut in some unfrequented place, a good distance from the kraal he belongs to; and, having assembled the men of the kraal, he acquaints them with the weak condition of the old man, desiring their consent to expose him in the distant hut built for that purpose, which they seldom or never refuse. A day being accordingly appointed to convey the poor creature to his last abode, the heir kills an ox, and two or three sheep, and invites the whole kraal to feast and be merry with them; and, when the entertainment is over, the old man is laid upon an ox, and carried to the hut, accompanied by most of the neighbours, where they shut him up, and leave him to perish. In the same manner they deal with a superannuated mother or female relation; and the reason they assign for this shocking custom is, that it would be more barbarous to suffer an old creature to languish out a miserable life, and be many years a dying, than to bring his misery to a speedy conclusion; and that it is out of extreme tenderness they put an end to the lives of the poor wretches in the manner above related.

C H A P. VII.

Of the AFRICAN ISLANDS.

THE principal islands of Africa are Madagascar, the island of Bourbon, that of Prince Maurice, the islands of Comorro, and Zocotara, all which lie to the eastward of the continent, in the Indian ocean. On the south-west lie the islands of St. Helena, Ascension, St. Matthew, Annabon, St. Thomas, and Prince's island; and on the north-west lie the Cape de Verd islands, the Canaries, the Madeiras, and the Azores; though these last seem more properly to belong to Europe, and some geographers place them among the islands of America.—Madagascar is one of the largest islands hitherto known in the world, it being about eight hundred miles in length, and in some parts above two hundred in breadth. At a distance from the sea, the country is full of high and steep mountains, but it abounds nevertheless with spacious plains, extraordinary good pastures, rivers, and lakes, springs of excellent water, and woods that wear a perpetual verdure.—The isle of Bourbon belongs to the French, where they have three pretty considerable towns, with a governor and several magistrates. It is a fine fruitful island, and is the place where the French East-India ships usually put in for refreshments. — Mauritius, or Prince Maurice's island, is possessed by the Dutch, who found it uninhabited, but have now a fort and garrison there, and have stocked the country with cattle and poultry. Here the Hollanders touch in their passage from the Cape to Batavia.—The other islands on the east of Africa are

are not very remarkable; nor are those on the south-west, except St. Helena, which belongs to our East-India Company, and is well fortified at the landing-places, it being of great benefit to their ships, which usually call there for refreshment, both in their passage to India, and their return to Europe. This island on every side appears to be a hard barren rock, but on the top it is covered with a fine earth twelve or eighteen inches deep, which produces plenty of grass, herbs, roots, &c. and is very proper for wheat and other grain, but their corn is mostly devoured by rats and other vermin before it comes to maturity. The country, beyond the ascent of the rock, is prettily diversified with rising hills and valleys, adorned with plantations of fruit trees and kitchen-gardens, amongst which the houses of the inhabitants are interspersed. Their vineyards of late years have been considerably improved, some French refugees having settled in the island, who are skilled in that branch of husbandry. They have plenty of black cattle, hogs, goats, turkeys, and all sorts of poultry; and they are not only blessed with the necessaries of life, but with a continued state of health to enjoy them, the air being usually serene and clear, the island frequently refreshed with cooling showers and the sea-breezes, and themselves almost constantly employed in the wholesome exercises of agriculture and gardening.—The other islands on the western side of Africa are not very considerable, till we come to those of Cape de Verd, which belong to the Portuguese. The principal of them is St. Jago, where our East-India ships outward bound are often supplied with water and fresh provisions, the island abounding with hogs, goats, and poultry. From some of these islands, particularly Mayo,

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the English export great quantities of salt to America.—The Canary islands, which are subject to the crown of Spain, are chiefly famous for their excellent wines; and the same may be said of the Madeiras, which belong to the Portuguese.—Several of the Azores, which likewise belong to Portugal, are very fertile, pleasant, and healthy, and have an excellent breed of cattle; but they are much subject to earthquakes and fiery eruptions*.

Thus much may suffice for a general account of the African islands; but they afford us some natural curiosities, which require a more particular description; and first

The PIKE of TENERIFFE.

TENERIFFE is one of the Canary islands, famous for its lofty mountain called the Pike or Peak, which rises like a sugar-loaf in the middle of the island, and may be seen at sea in clear weather at a hundred and twenty miles distance. Some authors make the height of this mountain fifteen miles, and others three or four times that number, computing undoubtedly the winding ascent; but Varenus says it is four miles five furlongs perpendicular, and Raimondus reckons it three miles only. Which of these accounts is nearest the truth we cannot determine, but perhaps it is that of Varenus. We may safely venture to say that the Pike is one of the highest mountains in the world; but the best account of it is that given by several English merchants and

* See an account of islands raised by subterraneous fires, in Vol. III. chap. 12.

others who had the curiosity to climb to the top of it, which we find in the history of the Royal-Society of London, published by Dr. Sprat, late bishop of Rochester; whereof the following is an extract.

THEY set out from Oratavia, a sea-port on the west side of the island, and passed over several bare mountains and sandy places, till they came to the foot of the Pike, where lies a vast number of huge stones, that seem to have fallen down from above. After they had ascended about a mile on horseback, they were obliged to alight and climb the hill on foot; and, having traversed a steep black rock about a mile higher, they found the top of it as flat as a pavement. Here the air was very cold after sun-set, and they were forced to keep great fires all night. The next morning they proceeded to that part of the mountain called the Sugar-Loaf, which being steep, and the soil a deep white sand, it was very difficult travelling, though they were provided with shoes that had soles a finger broader than the upper-leather, to facilitate the passage. When they came near the top of the Pike they found a strong wind, and a continual breathing of a hot sulphureous vapour issued from the hill, which scorched their faces, and made them sore. On the top there was a large basin or pit, shaped like an inverted cone, which was of considerable depth, and about a musket-shot over. The inside of this cavity, or caldron, (as it is called) is covered with small loose stones mixed with sand and sulphur, from whence issued a hot suffocating steam; and, the footing being so bad, they did not descend into the pit above four or five yards, though some have ventured to the bottom. The brim of this pit, on which they stood, was not above a yard broad; and from

hence they could clearly see the Grand Canary Palma, Gomera, and even Ferro, which is twenty leagues distant. As soon as the sun appears, the shadow of the Pike seems to cover not only this and the Great Canary island, but even the sea to the very horizon, where it looks as if, being limited, it turned up into the air.

THE same gentlemen relate, that there was a great deal of snow and ice about two thirds of the way up, but at the top there was none at all; which doubtless is owing to the hot steam proceeding from the caldron and the upper parts of the mountain. They mention a remarkable cave, ten yards deep and fifteen broad, in shape like an oven or cupola, with a hole at the top, near eight yards over, through which their servants let them down by a rope till they came to a bank of snow. At the bottom of the cave there is a round well of water, exactly underneath the opening above, the surface whereof is about a yard lower than the snow, and it's depth about six fathoms. This is not supposed to be a spring, but only snow blown in and dissolved, or water that drops from the rocks, and is there collected. About the sides and roof of this grotto there were icicles hanging down to the snow.—They met with no trees or shrubs in their passage but pines, and among the white sands a bushy plant like broom.

A PHYSICIAN, who lived upon the island of Teneriffe twenty years, gives it as his opinion, that the whole island, being impregnated with brimstone, formerly took fire, by the violence of which great part of it was blown up, there appearing about the island several mountains of huge calcined stones, that must have had their origin from such subterraneous commotions. He farther supposes, that the greatest quantity of sulphur

phur lying about the center of the island, the shock was there the most violent, and occasioned the rising of the Pike to it's present prodigious height; and this appears from the vast number of calcined rocks that lie at the bottom of it for three or four miles round. From the Pike to the south west as far almost as the shore, are still to be seen the tracks of the rivers of brimstone and melted ore which ran that way, and have so ruined the soil where they flowed, that broom is now it's only production.— The doctor adds, that in the south-west part of the island there are high mountains of a bluish earth, and stones with a rust on them like that of copper and vitriol, and that there are several springs of vitriolic water.

IN the year 1704, there happened a most dreadful earthquake in the island of Teneriffe, which began the 24th of December, and increased till the 31st, when the earth opened, and two volcano's were formed, which cast up so many burning stones as made two considerable mountains; and the combustible matter thrown up by these new volcanos kindled above fifty fires in the neighbouring places. On the 5th of January the air was darkened with ashes and smoke, the terror increased, and towards the evening the country was all in a flame for above a league in extent. This was the effect of another volcano, which had broke out towards Oratavia, with at least thirty mouths within the circumference of a quarter of a league. In a word whole towns were swallowed up or overturned, many thousands of people lost their lives, and the torrents of sulphur and metallic matter thrown out by these volcanos converted a great part of a fruitful country into a barren desert.

F O S S I L S.

UNDER this head we shall venture to place that fragrant drug called ambergrise, though it be a substance whose nature and origin have been as differently guessed at, as any thing in natural history. But it is now generally agreed by the most learned naturalists that it is a bitumen issuing out of the earth, at first of a liquid or at least a viscid confluence, but afterwards condensed and hardened. That ambergrise was once soft and fluid is evinced by the same proof that we have of the common amber having been so ; which is, that it frequently contains extraneous bodies immersed in it's most solid masses, which could not have been admitted there but when it was in a soft or fluid state. Small shells, little pebbles, and grains of sand are often found in it, and in general such bodies as it may be naturally supposed to pick up at the bottom of the sea; though there are some which one would wonder how it should get, such as pieces of honey-comb, and the like. Great quantities of it are found thrown up by the sea on the coast of Madagascar, and some other African islands, as well as on the continent. The seas about several of the Indian Islands abound with it ; and it is said to be met with sometimes on the northern coast of Great-Britain and Ireland.

THIS valuable bitumen is of a loose texture, remarkably light, of a rugged unequal surface, soft and fatty like suet or tallow to the touch, of a high-perfumed smell, and extremely various in shape and size. It is found in masses from an ounce in weight to thirty or forty pounds, and even

even much larger*, but such pieces are very rare, it's most usual standard being from four to ten ounces. It's natural colour, when most pure and perfect, is a pale grey; but the whitish particles are sometimes apt to wash off, and leave the black ones alone, which are of a firmer structure and and less scented. This has occasioned ambergrise to be distinguished into two kinds, ash-coloured and black, of which the latter is much less valuable. It is of great use amongst perfumers, and is recommended by physicians as proper to raise the drooping spirits, and to accelerate their motions. In the Eastern nations it is in high repute, and continually given as a cordial, a strengthener, and a prolonger of life.

HERE we might enumerate many other fossils belonging to the African islands, but in general they are such as are found upon the continent, or have been sufficiently spoken of already; and the same may be said of their animals, but two or three of their vegetable productions deserve our notice.

* We have various instances in authors of huge pieces of ambergrise, but we need only mention one that is recent and unquestionable, viz. that large lump which the Dutch East-India company bought in 1693 of the king of Tidore for eleven thousand dollars. It weighed a hundred and eighty-two pounds, was two feet two inches long, and five feet eight inches round in the thickest part. The duke of Tuscany offered fifty thousand crowns for this curiosity, which Nicolaus Chevalier has fully described in a small treatise published at Amsterdam in the year 1700.

VEGETABLES.

VEGETABLES.

EBONY, though not peculiar to Madagascar, grows plentifully in that island. This is a fine wood used in mosaic and inlaid works, toys, &c. being very hard heavy, and susceptible of a beautiful polish. There are divers kinds of ebony, black, red, and green, all of them the product of Madagascar; though Maurice island, the isle of Bourbon, and some of the American islands, furnish part of the ebonies used in Europe. Authors and travellers give a different account of the tree that yields black ebony, but the most authentic is that of M. Flacourt, who resided many years in Madagascar as governor of the island. He assures us it grows very high and thick, has a black bark, and its leaves are of a deep green colour, resembling those of our myrtle. Tavernier says, the islanders bury their trees when cut down, to make them the blacker. Ebony is much less used amongst us than anciently, since the discovery of so many ways of giving other hard woods a black colour.

THERE is a large tree growing in Madagascar in great abundance, from whose trunk distils a resinous gum called tacamahaca, of which there are two sorts, the one oozing from the tree spontaneously, the other by making incisions. It is not unlike our poplar-tree, only bigger and taller; its leaves are small and green, its fruit red, about the size of a walnut, exceedingly resinous, and containing a stone like our peaches. The gum is found good to digest and resolve tumours; and being applied in form of a plaister to the temples and, nape of the neck, it assuages pains of the head, represses defluxions of rheum, and
abates

abates inflammations of the eyes. It is also good against the tooth-ach, and in arthritic pains it is used externally with success.

IN the Cape de Verd islands there grows a remarkable fruit, called by the English the custard-apple, which is as big as a pomegranate, and much of the same colour. It's outside shell or rind is beset round with small regular knobs or risings, and the inside is full of a white pulp, sweet and very pleasant, much resembling a custard both in colour and taste; and in the middle there are a few small black stones or kernels. The tree that bears this fruit has long slender branches, at the extremity whereof the apples grow; but a large tree seldom produces above twenty or thirty.

HAVING thus finished our survey of Africa and it's islands, we must now cross the ocean, and take a view of the American continent.

PART



P A R T IV.
O F
A M E R I C A.

C H A P. I.
O F S O U T H A M E R I C A.

Y inspecting a map of America it appears that the north and south parts of that vast continent are joined together by a narrow neck of land called the isthmus of Darien or Panama, which is about sixty miles over from sea to sea, between Panama and Porto Bello : so that, when we divide America into north and south, it must not be understood that the equator makes this division, but the said isthmus ; for what is denominated South America extends at least twelve degrees to the northward of the equator.

THE whole length of America, from the most northern part of it yet discovered to the streights of Magellan, on the south, is about eight thousand miles in a direct line ; but, as to it's breadth, it is quite irregular, being in some places about three thousand six hundred miles, and not above sixty or seventy in the narrow isthmus above-mentioned.

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By the new discoveries made by the Russians, it has been found, that on the north, America extends very near the northern coast of Siberia, crossing the Pacific ocean, which also bounds the west of that continent; on the north it's limits are unknown; on the east it is divided by the great Atlantic ocean from Europe and Africa; and, on the south, by the streights of Magellan, which separate it from Terra del Fuego, on the south part of which is Cape Horn, reckoned the utmost verge of America. Thus this new world, as it is called, extends from the frozen regions of the north, where it's limits are secured from the observation of the curious Europeans, by impenetrable barriers of ice, through an extensive country, in which successively pass all the climates to be found in the other regions of the earth, on either side of the equator; till on the south you reach the snowy rocks of Terra del Fuego. It is extremely remarkable that the climates of North America are many degrees colder than those in the countries within the same latitudes in Europe. Thus the greatest part of the frozen country of New-found-land, the bay of St. Laurence and Cape Breton, where the cold is so severe in winter, as to freeze that great bay, and render navigation impracticable, lie opposite the western coast of France: Nova Scotia and New-England, where the frosts of winter are extremely sharp, and last a long time, are in the same latitude with the bay of Biscay, which washes the coasts of France and Spain.

INDEED, with respect to the climates of America, there are several very extraordinary particulars; since, in some parts, nothing on the earth can be more agreeable and enchanting, while, in other places, nothing can be more dreadful to human nature; America containing all that is agreeable

agreeable and delightful in the other parts of the earth, with all that is dreadful and most shocking to the mind. Under the equator, where one would imagine the earth to be scorched up with the too ardent rays of the sun, are countries that enjoy all the advantages of a perpetual spring; fields constantly covered with verdure, and enamelled with flowers of the most lively colours, and a mild climate, free from the extremes of heat and cold; where the winds, which are healthy, never blow with violence, and where rain, snow, hail, thunder, and lightning, are unknown; all this is true, with respect to the audience of Lima in Peru; but at the same time it is subject to the most dreadful earthquakes, as are other parts to the most terrible volcanoes. Under the equinoctial, where the heat, as before observed, might be thought insupportable, are mountains covered with everlasting ice and snow, where the cold is equal to that of the frozen regions in the extremities of the north; and, while Greenland smiles with verdure in the midst of summer, these mountains, within the tropics, have their tops so high above the clouds, as to experience no remission from the most piercing cold, and the sharpest frosts. Yet the height of snow on these lofty mountains diffuse a thousand advantages to the neighbouring plains, and moderate the heat of countries of great extent; the winds blowing over them being cooled and rendered more fit for respiration. But of these phænomena we shall be more particular in giving some account of the mountains of South America.

BUT, while we are mentioning the advantages and disadvantages of the climate in general, it will not perhaps, be improper to mention the inclemency of the air of Porto-bello, where many circumstances

circumstances contribute to render it worse than any other place on the whole earth. The heat is there excessive, it being augmented by the situation of the town, which is surrounded with mountains, without any interval to admit refreshing winds. The trees, on their summits, stand so thick as to prevent the earth drying under their branches; hence arise copious exhalations, which form large clouds that fall in violent torrents of rain; but this is no sooner over, than the sun breaking forth afresh, shines with his former splendor; yet has scarce dried the surface of the ground, not covered by the trees, than that orb is again concealed, and fresh showers fall. These torrents of rain, which, from their suddenness and impetuosity, seem to threaten a second deluge, are accompanied with such dreadful tempests of thunder and lightning, as are sufficient to damp the courage of the most resolute stranger; and this dreadful noise is prolonged by the echoes from the caverns of the mountains, and the dismal howlings and shrieks of the many kinds of monkeys, which dwell in their forests. Snakes here are extremely numerous, and innumerable toads swarm, not only in the damp and marshy places, as in other countries, but even in the streets, courts of houses, and all open places. Thus, when it has rained in the night, the streets and squares in the morning, seem paved with them; so that you cannot step without treading on them, which is sometimes productive of troublesome bites; for, besides their poison, they are so large, that their teeth are severely felt. They are generally about six inches long, and nothing can be imagined more dismal, than their croakings during the night, in all parts of the town, the woods, and caverns in the mountains. But, what is still worse, the air is so unhealthy,

healthy, that the galleons or other European ships, which stay here any time, seldom leave it, without burying half, or, at least, one-third of their men: hence it has been justly termed the grave of the Spaniards. It is there universally asserted, that the animals brought from other climates, on their arrival, immediately cease to propagate their species; horses and asses there never breed; the hens brought from Panama or Carthagena, on their arrival, lay no more eggs; and horned cattle, though there is plenty of pasture, lose their flesh so as not to be eatable.

A COUNTRY of such vast extent, not only on each side of the equator, but reaching so far beyond each of the tropics, must of necessity be supposed to have as great a variety of soils, as it has of climates; some countries consist of the most beautiful lawns, pastures, fields, and meadows, watered with fine streams, shaded with groves, and variegated with hills and vallies; while others only present to the eye dreadful rocks, dreary deserts, mountains of a stupendous height, forests of an amazing extent, and the most astonishing scenes of wild, rude, and uncultivated nature. Several of the Spanish plantations, in particular, are wonderfully rich and fruitful, abounding in corn, the most beautiful pastures, trees that afford the richest fruit, shade, and ornament; odoriferous shrubs, medicinal plants, woods, and roots, with flowers that delight the senses; with the richest minerals and precious stones. In short, almost every thing, which nature produces in any quarter of the globe, may here be found growing spontaneously, or raised by labour, in it's greatest perfection; besides which, it has an almost infinite variety of others, peculiar to itself, which will not grow, or, at least, thrive, in an equal manner, in any other country.

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THE South part of America, which we are now going to survey, comprehends, 1. Brasil, belonging to the Portuguese; 2. Paraguay, subject to Spain; 3. Terra Magellanica, possessed by the natives, and to us little known; 4. Chili, belonging to Spain; 5. Peru, subject to the same crown; 6. The inland country of the Amazons, unconquered and inhabited by the natives; 7. Guiana, where the Europeans have a few settlements on the coast; and, 8. Terra Firma, or the Spanish Main.—But it is time to come to particulars, and see what is most curious and remarkable in these countries, so long hid from the knowledge of the inhabitants of the rest of the globe.

MOUNTAINS, SPRINGS, VOLCANOES, EARTH-
QUAKES, RIVERS, BRIDGES, &c.

IT is generally allowed, that the mountains of South America are not to be paralleled in any other part of the world, for their surprising height and extent; witness that prodigious chain of them called the Andes, which begins in the most northern part of Peru, and extends itself quite to the Straights of Magellan, a length of between three and four thousand miles. Acosta relates, that he once ascended one of the highest of these mountains in Peru, called Pariacaca; and that he went prepared according to the best instructions he could get, with several more who had the like curiosity; but, notwithstanding all his precaution, when he came near the top he was seized with such pains that he thought he should have fallen to the ground; and, the rest of the company being under the like disorder, they all made haste down as fast as they could, without waiting for one another. They were all taken with violent reachings to

to vomit, and not only brought up green phlegm and choler, but a great deal of blood. This lasted for three or four hours, till they had descended to the lower part of the mountain; and some of them purged violently: But generally the sickness goes off before they get to the bottom, and is attended with no ill consequences.

PEOPLE who pass this ridge of mountains in any part of them, for upwards of five hundred leagues, are affected in the like manner, but more in some places than in others. Acoſta had passed the Andes at four other different places, and always felt the like disorder, but not so much as at Pariacaca; and the best remedy they found against it was to stop their mouths, noses, and ears as much as possible; the air being so subtile and piercing, that it affects the entrails both of men and beasts. This indeed is no wonder, since the height of the Andes (according to Acoſta) is such, that the Alps, in comparison to them, seem but as ordinary houses in regard to lofty towers. Hence our author concluded, that the air on the top of these mountains was too pure and subtile for animals to breathe in, they requiring a grosser medium*; and this, he supposed, occasioned that disorder in the stomach.

As

* As too gross, so too rare an air is unfit for respiration, as appears not only from experiments made by the air-pump, but from the accounts of those who have been on the tops of very lofty mountains, where the air is considerably rarefied. An ecclesiastical person, who had visited the high mountains of Armenia, told Mr. Boyle, that, whilst he was on the upper part of them he was forced to fetch his breath oftener than usual; and, taking notice of it when he came down, the people told him it was what they themselves had frequently experienced. The same ecclesiastic made the like observation

As to the reachings and vomitings complained of by those who pass Andes in Peru, it is remarkable that those who travel over that high chain of them in Chili called the Cordillera, are not affected with such disorders, but only with a difficulty of breathing, which is perceived more or less on the tops of all high mountains: so that in Peru there may possibly be a concurrence of some other causes besides the thinness of the air, to produce the above effects, since the mountains of Chili are considerably higher, and consequently the air at the top of them more rarefied.

IN order to give a more perfect idea of the climate on the top of these mountains, we shall give some account of that which prevailed on Pichincha, when the mathematicians, sent thither by the kings of France and Spain, were stationed there, in order to make observations on the figure of the earth. It ought to be observed, that this mountain is almost directly under the equinoctial, and that though it is famous for its great height, it is twelve hundred and seventy-eight yards in a perpendicular line, lower than the mountain of Cotopaxi; but it will be impossible for the reader to conceive the comparative coldness of the summit of the last mentioned mountain, from that felt on this, since it must exceed every idea that can be formed in the human mind, though both are situated in the midst of the torrid zone.

observation on the top of a mountain in the Cevennes; and a curious traveller, on one of the of highest ridges of the Pyrenees, called Pic de Midi, found the same inconvenience, he and his company being obliged to breathe shorter and oftener than in the lower air. — See Derham's Physico-Theology, p. 6. and Phil. Trans. No. 63.

PINCHINCHA

PINCHINCHA was formerly a volcano, but the mouth, on one of it's sides, is at present covered with sand and calcined matter, and neither fire nor smoke is seen to issue from it. Our learned author Don George Juan de Ulloa observes, that he found the cold on it's top extremely intense, the wind violent; and they were frequently involved in so thick a fog, or, in other words, a cloud, that an object at six or eight paces distance was scarcely discernible. The air grew clear, by the clouds descending nearer to the surface of the earth, when they, on all sides, surrounded the mountain to a vast distance, representing the sea with their rock, standing like an island in the center. When this happened, they heard the dreadful noise of the tempests, that discharged themselves on the city of Quito, and the neighbouring country. Looking down, they saw the lightning issue from the clouds, and heard the thunder roll far beneath them. While the lower parts were involved in thunder and rain, they enjoyed a delightful serenity; the wind was abated, the sky clear, and the invivifying rays of the sun moderated the severity of the cold. But, when the clouds rose, their thickness rendered respiration difficult; snow and hail fell continually, and the wind returned with all it's violence; so that it was impossible to overcome intirely the fear of being, together with their hut, blown down the precipice, or of being buried in it, by the daily accumulations of ice and snow. Their fears were likewise increased by the fall of enormous fragments of rocks. Though the smallest crevice, visible in their hut, was stopped, the wind was so piercing, that it penetrated through; and, though the hut was small, crowded with inhabitants, and had several lamps constantly burning, the cold was so great, that every person

person was obliged to have a chafing-dish of coals, and several men were constantly employed every morning to remove the snow which fell in the night. By the severity of this cold, their feet were swelled, and grew so tender, that they could not walk without extreme pain; their hands were covered with chilblains, and their lips so swelled and chopped, that every motion, in speaking, made them bleed*.

FROM barometrical experiments made on the mountain Cotopaxi, it appears that it's summit is elevated six thousand two hundred and fifty-two yards above the surface of the sea, something above three geographical miles, which greatly exceeds the height of any other mountain in the known world. Cotopaxi became a volcano at the first arrival of the Spaniards in this country, and a new eruption happened in 1743, which had been for some days preceded by a continual rumbling in it's bowels: after which an aperture was made in it's summit, and likewise three others, near the middle of it's declivity, at that period buried under prodigious masses of snow. The ignited substances ejected on that occasion, mixed with a vast quantity of snow and ice, melting amidst the flames, were carried down with such

* M. Bouguer, who was engaged in the same expedition as the last mentioned gentleman, says, "There is in all this
 " range of mountains, as far as I have travelled, a constant
 " inferior boundary, beyond which the snow never melts;
 " this boundary, in the midst of the torrid zone, I found
 " to be two thousand four hundred and thirty-four fathoms
 " above the level of the South Sea. The snow, indeed, falls
 " much lower, but then it is subject to be melted the very
 " same day; whereas, above that, it preserves itself,"

"The gather'd winter of a thousand years."

amazing rapidity, that, in an instant, the plain from Callao to Latacunga was overflowed, the houses of the poor inhabitants were borne down, and great numbers of them perished. The river of Latacunga was the canal of this dreadful flood, till, being too small for receiving the prodigious current, it overflowed the adjacent country, carried away all the buildings within it's reach, and rendered the land, near the town of the same name, like a vast lake. The inhabitants retired to a spot of higher ground behind the town, while those parts of it that stood within the limits of the current, were intirely destroyed. During three days the volcano ejected cinders, while torrents of melted ice and snow poured down it's sides. The fire lasted several days longer, and was accompanied with terrible roarings of the wind, rushing through the mouth of the volcano. At last all was quiet, and neither fire nor smoke were to be seen. But, in May 1744, the flames forced a passage through several other parts on the sides of the mountain; so that in, clear nights, the flames, being reflected by the transparent ice, formed a very grand and beautiful illumination. But, on the thirteenth of November following, it ejected such prodigious quantities of fire and ignited substances, that an inundation, equal to the former, soon ensued; and the inhabitants of the town of Latacunga, for some time, gave themselves over for lost.

WE are told that there are fiery meteors about these mountains, sometimes so high in the air, as to resemble stars, and sometimes so low, as to frighten the mules, by buzzing about their ears and feet. But a phænomenon, which in this climate must appear very extraordinary, is said by M. Bouguer to happen almost every day on the
tops

tops of these mountains; though these gentlemen were the first who ever mentioned them in Europe. The first time our authors observed it was, when they were on the summit of Pambamorea, a mountain not so high as Pichincha. A cloud, in which they were involved at break of day, dissipating, they saw the rising sun extremely splendid, and the cloud passed on the other side, opposite to the sun, where it appeared very thin, and was about twenty yards distant from the place where they were standing, when each of them saw in it, as in a looking-glass, his own image, and, what appeared still more extraordinary, the head was encompassed with a glory, like that seen round the heads of saints in pictures; each head being, as it were, the centre of three concentric irisis of very lively colours, and each with the same varieties as a rainbow, the red being outward; the last or most external colours of one touched the first of the following; and, at some distance from them all, was a fourth arch, intirely white. These were perpendicular to the horizon; and, as the person moved, the phænomenon moved also. But, what was very extraordinary, though there were six or seven persons, each could see none but his own shadow, because the cloud had an uneven surface. The diameter of the arches gradually altered with the ascent of the sun above the horizon, and the phænomenon itself, after continuing a considerable time, insensibly vanished*.

ULLOA

* Several of the gentlemen, both French and Spaniards, have particularly described this phænomenon, and M. Bouguer concludes with saying, "This was a kind of apotheosis to each spectator; and I cannot forbear mentioning again, that each enjoyed the secret pleasure of seeing himself adorn-

ULLOA observes, that the roads over some of these mountains are not the least of those many extraordinary particulars relating to them. These are in many places so narrow, that the mules have scarce room to set their feet, and in others is a continued series of precipices. These roads are, besides, full of holes, near three quarters of a yard deep, in which the mules put their fore and hind feet, whence they sometimes draw their bellies, and the riders legs, along the ground. These holes indeed serve as steps, without which the precipices would be in a manner impassable; but, should the mule happen to put his feet between two of these holes, or not place them right, the rider falls, and, if on the side of the precipice, inevitably perishes. But the manner of descending appears still more dangerous. On one side are frequently steep eminences, and on the other dreadful abysses; and, as they generally follow the direction of the mountain, the road, instead of being on a level, forms steep eminences and declivities. The mules are sensible of the caution necessary in these descents; for, coming to the top of an eminence they stop, and having placed their fore feet close together, put their hinder feet a little forwards, as if going to lie down. Having in this attitude taken a survey of the road, they slide down with the swiftness of a meteor. All the rider has to do is to keep himself fast in the saddle; for the least motion is sufficient to disorder the equilibrium of the mule, in which case, they

“ ed with all these crowns, without perceiving those of his
 “ neighbours. I must, however, observe, that this phœno-
 “ menon never appears, but when the aqueous particles of
 “ the cloud are frozen.

both

both unavoidably perish. Nothing, says our author, can be more amazing than the animal's address on this occasion, for during this rapid motion, when he seems to have lost all government of himself, he follows with the utmost exactness the different windings of the road, as if he had accurately settled in his mind all the turnings he was to follow, and taken every precaution for his safety. Yet the longest practice in travelling these roads cannot intirely free the mules from a kind of dread, which they experience on arriving at the top of a steep declivity; for they not only attentively view the road, but tremble and snort at the danger. If the rider inadvertently endeavours to spur them on, they continue immoveable, till, at length, having overcome the first emotions of their fear, they stretch out their fore legs, that by preserving a proper balance, they may not pitch head forwards; and it is wonderful to consider how they make with their body, all the gentle inclinations necessary to enable them to follow the several windings of the road, and afterwards their address in stopping themselves at the end of their impetuous career.

THE tediousness and danger of the way is however, in some parts, alleviated and rendered more tolerable by the fine prospects and agreeable cascades naturally formed among the rocks and mountains. In some parts, the water in the valleys springs up to a great height, like artificial fountains, amongst odoriferous plants and flowers, that yield a delightful prospect. Many of these streams and springs are so exceeding cold, that a man can scarce drink them, or hold his hand in them above a minute; but in some places there are hot springs, which leave a green tincture in the channel through which they pass, and are reckoned good against many distempers.

FROM most of the mountains flow large and rapid rivers, and we read of a natural bridge of rocks over one of them, from the vault of which hang several pieces of stone resembling icicles, formed, as the water drops from the rock, into various shapes and of different colours. This bridge is broad enough for three or four carts to pass abreast; and there is another bridge near it, laid over by art (as some say) between two rocks, but an author, who saw it, thinks it is rather the work of nature. It is so far above the river that he could not hear the stream, though it runs with great rapidity; and, though the river be of a considerable breadth, it appeared like a brook, when he looked down from the bridge, which he could not do without horror.

THE bridges made by art are generally far from being commodious. Of these there are two kinds, besides those of stone, which are very few. The most common are of wood, and the rest of the bejucos, a plant we shall particularly describe when we come to treat of the vegetables of South America. With respect to the first, they chuse a place where the river is very narrow, and has on each side high rocks. These bridges only consist of four long beams laid from one precipice to the other, forming a path about a yard and a half in breadth, just sufficient for a man to pass over on horseback; and custom has rendered them so familiar, that people pass them without any apprehensions. Those formed of bejucos are never used but where the breadth of the river will not admit of beams being laid across. Several of these bejucos are twisted together, in order to form a large cable of the length required; and six of them are drawn from one side of the river to the other, two of which being considerably higher

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er than the other four, serve for rails. Across those at the bottom, are wattled sticks of bejuco, and the whole is not unlike a fishing-net, or Indian hammoc, stretched from one side of the river to the other; but, as the meshes of this net are very large, and the foot would be in danger of slipping through, they cover the bottom with reeds, which serve for a floor. The mere weight of this kind of basket bridge, and much more the weight of a man passing over, must cause it to make a prodigious bend; and, if, says our author, it be considered, that the passenger, when in the midst of his course, especially if there be a wind, is exposed to be swung from side to side, a bridge of this sort, sometimes above ninety feet long, must appear extremely frightful; yet the Indians run over it, loaded with the baggage and pack-saddles of the mules, laughing to see the Europeans afraid of venturing. The greatest part of these bridges are only for men and women, the mules swimming over the rivers; for, their loading being taken off, they are driven into the water about a mile and a half above the bridge, in order that they may reach the opposite shore near it, they being usually carried so far by the rapidity of the stream.

INSTEAD of a bejuco bridge, some rivers are passed by means of a tarabita, which is a single rope, either made of bejucos, or thongs cut from the hide of an ox, and consisting of several strands, which, when twisted, form a rope of six or eight inches in thickness. This is extended across the river and fastened on one side to a strong post, and on the other to a wheel, that it may be streightened or slackened as occasion serves. From the tarabita, hangs a kind of leathern hammoc, big enough to hold a man, and suspended by a clue at

each end, hanging in a loop over the tarabita. A rope is also fastened to it, and extended over the river, for drawing the hammoc to the side intended; which, with a push at it's first setting off, sends it quickly to the other side. This not only serves to carry over persons, but the burthens of beasts, and also the beasts themselves, where the rapidity of the current, and the prodigious stones continually carried along by it, render it impracticable for them to swim over. For carrying over the mules, two tarabitas are used, one for each side of the river; and these are much thicker and flacker. On this rope is only one clue or loop, which is of wood; and by this a beast is suspended, he being fastened to it with girths round the belly and neck. When this is performed, the creature is shoved off, and almost immediately landed on the opposite side. Those accustomed to be conveyed over in this manner never make the least opposition, but come of themselves to have the girths fastened round them: yet they are at first brought with great difficulty to suffer this to be done, and, on their finding themselves thus suspended in the air, kick and fling during their short passage.

BUT, if we may believe Acoſta, there is still a greater danger in travelling over some of the mountains of Peru, than any we have yet mentioned. He tells us, that there are mountainous uninhabited deserts, where a sudden blast of air sometimes strikes a traveller dead in an instant; and that the Spaniards formerly passed these mountains in their way to Chili, but now either go by sea, or take another road by land, to avoid the danger of crossing them, in which journey many have perished, and others have lost their fingers and toes, and have been rendered cripples. The same
author

author relates, that, general Costilla marching over them with his army, great part of his men suddenly fell down dead, and their bodies remained there without stench or corruption. As incredible as this appears, it seems to be confirmed by the reports of our seamen, who assure us, that they have seen great numbers of bodies of men, women, and children, lying dead upon the sands in Peru, and looking as fresh as if they had not lain there a week; but, when they were handled, they proved as dry and light as a sponge or a piece of cork. Whatever was the cause of the death of these people, it is agreed on all hands, that the dryness of the Peruvian air, and the heat of the sands, preserved their bodies from putrefaction.

IN treating of the climate of America, we mentioned the extraordinary advantages the audience of Lima enjoys in being free from tempests, thunder, lightning, snow, hail, and rain; but observed that it is subject to earthquakes, which indeed happen here so frequently, that the inhabitants are under continual apprehensions of being buried in the ruins of their own houses: yet they are said to have their presages; one of the chief of which is a rumbling noise in the bowels of the earth about a minute before the shocks are felt, and seems to pervade all the adjacent subterraneous parts. This is followed by the howlings of the dogs, who appear sensible of the approaching danger; and the very beasts of burden, passing the streets, are observed to stop, and, by a natural instinct, to spread open their legs, the better to secure themselves from falling. These portents are no sooner observed, than the terrified inhabitants fly from their houses into the streets, with such precipitation, that, if it happens in the night, they appear quite naked, fear, and the urgency

of the danger, banishing all sense of decency. This sudden concourse is accompanied with the cries of children, awaked from sleep, mingled with the lamentations of the women, whose agonising prayers to the saints increase the common fear and confusion ; and, the men being also too much affected to refrain from giving vent to their terror, the whole city exhibits a dreadful scene of consternation and horror.

THE earthquakes that have happened in the city of Lima, are very numerous ; but we shall only mention two of them. One of the most terrible was on the twenty-eighth of October 1687, and began at four in the morning, with the destruction of many of the finest public buildings and houses, in which a great number of the inhabitants perished ; but this was little more than a presage of what followed ; for, two hours after, the shock returned with such impetuous concussions, that all was laid in ruins, and the inhabitants began to think themselves happy in the preservation of their lives, and being only spectators of the general devastation, and the loss of all their property. But alas ! during this second shock, the sea, retiring considerably, and then returning in mountainous waves, entirely overwhelmed Callao, and the adjacent country, together with the miserable inhabitants.

FROM that time six earthquakes happened at Lima before the dreadful one of 1746. This was, at half an hour after ten at night, when the concussions began with such violence, that in little more than three minutes the greatest part, if not all the buildings, in this fine and beautiful city, were destroyed, and those of the inhabitants who had not made sufficient haste, into the streets and squares, were buried under the ruins. At length

length the terrible effects of this first shock ceased, but the tranquillity was of short duration; the concussions swiftly succeeding each other, the fort of Callao also sunk into ruins; but what the city had suffered from the destruction of its buildings, was inconsiderable, when compared with the dreadful catastrophe which followed; for the sea, as usual, receding to a considerable distance, returned in mountainous waves, foaming with the violence of the agitation, and suddenly turned Callao and the neighbouring country into a sea. This, however, was not perfectly performed by the first swell of the waves; for the sea, retiring still farther, returned with greater impetuosity, and covered both the walls and the ruins of the place; so that what had even escaped the first, was now totally overwhelmed, by those terrible mountainous waves. In the harbour were twenty-three ships and vessels, great and small; nineteen of which were sunk, and the other four carried to a considerable distance up the country. This terrible inundation extended to other parts of the coast, and several towns underwent the same fate with the city of Lima.

THE rivers of South America, especially those which take their rise to the eastward of the mountains we have been speaking of, deserve our notice, some of them being the largest in the world, both with regard to their depth and breadth, and the length of their course; but most of those that rise on the west side of the Andes are rather torrents than rivers, made by the annual rains that fall on the mountains.—The Rio Grande or Magdalena, which has its source in the province of Quito in Peru, near the equator, runs directly northward above a thousand miles, and falls into the

sea between Carthagena and St. Martha.—The celebrated river Oronoquo or Oronoko, which has it's source not far from that of Magdalena, after a winding course of fifteen hundred miles or upwards, falls into the north sea near the isle of Trinidad, forming a large gulf, in which there are many small islands.—But the most amazing river, and generally supposed the largest in the world, is that of the Amazons *, which rises about ten leagues from Quito in Peru, and after many windings and turnings keeps it's course to the east, till it falls into the Atlantic ocean between the coasts of Guiana and Brazil. It's channel, about sixty leagues from it's head,

* It may not be amiss to acquaint the reader with the origin of the name of this river, and of the country through which it flows. The Amazons then, according to the ancient historians, were a nation of warlike women, who founded an empire in Asia Minor, along the coasts of the Black sea, out of which men were excluded. What commerce they had with that sex was only with strangers at some appointed times, and all their male children they killed, and cut off the right breast of the females, that their arm might be the stronger and more at liberty in battle. It is a point controverted indeed, even amongst ancient writers, whether such a nation of Amazons ever existed, but the greatest part of them are on the affirmative side of the question. M. Petit, a French physician, published a Latin dissertation in 1685 to prove that there really was such a race of female warriors, wherein he has made curious enquiries relating to their habit, their arms, the cities they built, &c. Be this as it will, the Spaniards, who first discovered and sailed up the American river we are speaking of, were told of such a barbarous nation of women by some of the natives, on purpose to frighten them; and they actually found the women in several places bordering on the river as fierce and warlike as the men, it being their custom to accompany their husbands to battle, and to share their fate: and hence proceeded the name of the country and river of the Amazons.

is three miles broad; and, as it receives many large rivers in it's course, it grows wider and wider as it advances towards the ocean, where it's mouth is fifty or sixty leagues in breadth. Even before it leaves Peru, it's depth is ten or twelve fathoms, from whence it increases to twenty, thirty, fifty, and sometimes much more, before it reaches the ocean. From it's source to it's mouth it is eight or nine hundred leagues in a direct line; but the windings make it about twelve hundred, or eighteen according to some computations. In the year 1639 Texeira, a Portuguese, employed himself ten months in making a survey of this great river.—There is another river of South America little inferior to the former in breadth and depth, though it does not come up to it in length of course, viz. that called Rio de la Plata, which, reckoning only from the confluence of the two rivers that form it, runs above two hundred leagues, and is all the way navigable for the largest vessels, and full of delightful islands. In it's course it receives several considerable rivers, and sometimes swells to such a height as to overflow a great deal of land on each side, during which time the natives betake themselves to their canoes, and when the inundation abates, return to their old habitations. It falls into the ocean by a mouth thirty leagues broad, running with such strength and rapidity, that it takes off the saltiness of the sea to the distance of several miles. A certain author tells us, that the water of this river is very clear, sweet, and excellent for the lungs, so that the people who drink it have melodious voices, and are generally inclined to music; but such an account is too whimsical to be regarded. He adds, that it petrifies the branches of trees that fall into it, and that vessels of various figures are naturally formed

formed of it's sand, which keep water cool, and look as if they had received an artificial polish.

WE shall only mention one more river, or at least a considerable stream of water, remarkable for it's subterraneous passage. This is in the western parts of Tucuman, a province of Paraguay, where it seems there is a very large and lofty mountain, which, from it's glittering when the sun shines upon it, is called the Crystal mountain. Under this is extended a frightful cavern, through which runs a river with so many windings and turnings that the water is four and twenty or thirty hours in it's passage from one side of the mountain to the other, according to the computation of some Portuguese, who were rash enough (as Purchas relates) to make the experiment, by hazarding their persons on a rafter made of canes.

As to the qualities of the waters in the south part of America, it is observed that some lakes in the vallies are extremely hot, particularly one near Potosi in Peru, which perfectly boils up in the middle, where the spring rises ; but the heat is so moderate near the shore, that the inhabitants bathe in it frequently. In the sandy plains near the coast of Peru there are very few springs, but a great variety in that part which is remote from the sea ; amongst which there is one near Oropeza, whose water is very hot, and after running a little way it petrifies and forms a rock. It is said the natives use the stone in building their houses, it being soft, light easily wrought, and yet very durable. Travellers also tell us of springs of liquid matter much resembling tar, and put to the same uses by sea-faring people.

At the baths of the Yncas (as they are called) an appellation given to the ancient kings of Peru, there is a spring of water that issues out hot and boiling,

boiling, and another near it as cold as ice, which used to be tempered and mingled together for those princes to bathe in.—Near Cusco there is said to be a fountain, whose waters, after a short course, turn into salt.—From the top of the mountain Balconotta, by some reckoned the highest in Peru, there rise two springs, which run different ways, and soon form two considerable streams. Their waters, when they first issue from the rocks, are of an ash-colour, hot and smoaking, and smell like burning coals; which smell they retain a great way from their source, till they mingle with other streams, and become cool.—To these we may add another fountain in Peru, which sends forth a stream almost as red as blood, from whence it has obtained the name of the Red river.

F O S S I L S.

ALMOST every part of South America affords mines of gold and silver, but those rich metals are most abundantly found in Chili and Peru, as well as large quantities of copper, tin, lead, and quicksilver. It is observed, that gold is most frequently found native of all the metals, being rarely met with in a state of ore, and then intermixed with the ores of other metals: but, though native gold be free from the penetrating sulphurs which reduce other metals to ores, it is very seldom found pure, but has almost constantly a mixture of silver with it, and frequently of copper. If it have any considerable quantity of copper in it, it is easily discovered by it's hardness; but the silver is not so readily detected. Sometimes the native gold is found in the mines in pure masses, so large as to weigh twelve, fourteen, or sixteen ounces; but these are very rare. It's more common appearance
in

in it's loose state is in form of what is called gold dust, that is, small particles mixed among the sand of rivers; which is very frequent in Guinea, as we have already observed, and many other parts of the world. But native gold is also found in a middle state, as to size, between the two kinds just mentioned, in the clefts or perpendicular fissures of the solid strata in the mountains of Chili. These fissures are usually filled with a reddish earth, the native gold being either loose amongst it, or immerced in a debased crystalline stone of a bluish hue, and generally in flattish pieces, from the size of a small pea to that of a horse-bean; but no great quantity has yet been discovered. When they have dug out this red marle, it is carried on mules to the lavaderos (as they call them) a sort of basons of water*, where it undergoes several repeated lotions in different waters, till the earthy and impure parts are all separated and carried away by the stream, and the gold left at the bottom.

In these forms gold frequently appears in those parts of the world where it abounds, but still the greatest quantities of it are found bedded in masses of hard stone, which lie at vast depths, being often dug at a hundred and fifty fathoms. There

* These lavatories or basons, according to M. Frezier, are made somewhat in the manner of a smith's bellows, into which a little rivulet of water runs with a great deal of rapidity, dissolving the parts of the earth, and carrying every thing away with it except the particles of gold, which by their weight precipitate to the bottom. Sometimes large pieces of gold are found in these lavatories, which usually turn to very great profit when there is no want of water, the expences of getting gold this way being but trifling, compared with those accruing in the common method, by machines, fire, and quicksilver.

is no peculiar stone in which it is immersed, but it is met with indiscriminately in several kinds, some softer, some harder, and even in earths. The richest masses are usually a whitish but opaque stone, which is a debased crystal, containing a great deal of white earth, often tinged likewise with black, and sometimes with other colours. In this stone the gold lies in a great variety of figures, sometimes like small branches, at other times interwoven in narrower or broader veins, or in little flat spangles intermixed with specks of black. But, besides this sort, there are many coarser stones in the mines of Peru, which contain considerable quantities of gold, visible in large or small spots; and these are of all colours, but generally white or reddish. In these stones the gold is commonly in small spangles.

IN order to separate the gold when dug out of the mines, they first break the metalline stone or ore with iron mallets, and then carry it to the mills, where it is ground to a very fine powder, which is afterwards passed through several brass-wire sieves, as fine as any we have made of silk †. The powder thus prepared is laid in wooden troughs, with a proper quantity of mercury and water, where it is worked together, and there left to saturate in the sun and air for eight and forty hours. During this time the mercury imbibes all the gold, without cohering with the coarser earth or sand, which, upon inclining the trough, is easily washed away with the water. The mass which remains now concreted at the bottom is nothing but gold, mercury, and some fine earth,

† The usual method of separating gold from the ore in Hungary see in Vol. II. p. 106, 107.

which

which last they disengage from the mass by repeated affusions of hot water, and the mercury they separate by distillation in large alembics. The gold in this state, though not yet perfectly pure, is called virgin gold, as well as that found in the sand of rivers, or that in grains in the mines, in regard none of them have passed the fire. After this they usually fuse it in crucibles, and cast it into plates or ingots.

THE next metal to gold in value is silver, and of this the mines of Peru and some other parts of America afford the greatest quantities of any in the world. This metal, as well as gold, is found native more frequently than in a state of ore; what are commonly called silver-ores, says Mr. Hill, (on whose authority we chiefly depend in these matters) being no other than stones of various kinds, in which are bedded large quantities of native silver. Sometimes it is also contained in the softer fossils, as earths; and sometimes it is found loose among strata of sand. That which is lodged in stone is usually disposed in flat masses variously streaked, ridged, and often resembling silver lace; that in earths is frequently branched, and that among sand in small roundish or oblong granules. However, though silver is often found thus native and pure, it is likewise frequently met with in a state of ore, and sometimes embodied in the ores of other metals. The proper and peculiar ores of silver are also very various in their appearance, but its most usual ore is a singular and remarkable body, being naturally malleable. The colour of this is a blackish blue, and it so nearly resembles lead that many have mistaken it for that metal in its native state. It is found in large irregular masses, sometimes of a laminated structure, extremely heavy, and very rich in metal.

tal, containing often three fourths of pure silver; but among these are usually found some of a more debased nature, containing much less silver, and distinguished from the rest by their not being malleable and of a paler colour.

ANOTHER appearance of silver in the state of ore is in brownish masses, obscurely transparent, not a little resembling the coarser sorts of amber. These are usually of an irregular shape, often in the form of our common pebbles, but sometimes flatted and with rugged edges. This sort of ore breaks with a slight blow, and is also very rich in silver, usually containing near two thirds of it's weight in metal. But there is yet another appearance of silver-ore, superior to all other ores in beauty, being a compact substance, of a regular texture, of a very bright red, a smooth even surface, and considerably pellucid. This very much resembles the native sandarach*, and is sometimes exactly of the fine florid red of that body, and now and then approaching to a crimson.

THESE are the more usual appearances of silver in a state of ore, but it is found with numberless accidental variations; and there are stones of all colours and consistencies wrought in different places for the silver they contain. In the mines of Peru, some of the ores, as they are called, are grey spotted with blue and red; others have various shades of red, with admixtures of yellow or brown; and others are black, green, or yellow.

* This is a preparation of orpiment, and is the same with what is otherwise called red arsenic; but there is also a white gum named sandarach, obtained from the trunk and thick branches of the great juniper-tree, by incisions made in the heats of summer.

Some of these are of the nature of one or other of the ores above described, only debased by adventitious mixtures; the others are stones wherein native silver is lodged, which are commonly confounded with the rest under the name of silver-ores. The black ores are the richest and most easily wrought, and the silver they yield is of the best sort. The veins of silver, of what quality soever, are usually richer in the middle than towards the extremities; but the richest places are those where the veins intersect.

THE most celebrated mines of Peru are those of Potosi, which have now been opened above two hundred years, and yet continue to be wrought with equal advantage as when first discovered; only with this difference, that the veins, which were then almost on the surface of the mountain, are now sunk to prodigious depths, some of the pits or wells being two hundred fathoms deep, and yet (which is very remarkable) not incommoded with water. What renders the working of the mines exceeding dangerous are the exhalations arising from them, which are even felt on the outside, and affect animals that graze in the neighbourhood; but within they stupefy the miners, none of whom can bear so poisonous an air above a day together. Sometimes it is so fatal as to kill on the spot, and oblige them to stop up the veins from whence it exhales. The mines of Potosi are much the least subject to these vapours, and yet, without the herb paraguay, the infusion whereof is drank by the miners as we do tea, these mines must soon be abandoned. Some millions of Indians have perished in them, and prodigious numbers continue to be destroyed yearly.

THE mountain of Potosi, which is famous for the immense quantity of silver it has produced,
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was first discovered to contain that metal, by a mere accident. An Indian, by some called Gualca, and by others Hualpa, pursuing some wild goats up this mountain, and coming to a very steep part, laid hold of a shrub, in order to ascend with the greater celerity; but, it being unable to support his weight, came up by the roots, and discovered a mass of fine silver; and at the same time he found some lumps of the same metal among the clods which adhered to the roots. The Indian, who lived at Porco, hastened home, washed the silver, and made use of it, repairing, when his stock was exhausted, to his perpetual fund. At length, an intimate friend of his, named Guanica, perceiving the happy change in his circumstances, eagerly sought to know the cause; and repeated his questions with such earnestness, that Gualca, confiding in his friendship, revealed the secret. For some time, they resorted to the mountain for fresh supplies, till, Gualca refusing to discover his method of purifying the metal, Guanica, in revenge, revealed the whole secret to his master Villarroel, who went, in April 1545, to view this fortunate breach in the mountain; and the mine was instantly worked with immense advantage. The first mine had the name of The Discoverer, from it's occasioning the discovery of other sources of wealth inclosed in the bowels of this mountain; for, in a few, days another was found no less rich, and was named the Tin mine; afterwards another was found and distinguished by the name of Rica, or Rich, it exceeding all the rest. At length, another was discovered, which was called the Mendieta. These are the principal mines of this celebrated mountain; but there are several smaller, crossing it on all sides.

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THE importance of these discoveries induced people to flock to Potosi from all sides, particularly from the city of Plata, which stands about seventy-five miles from the mountain, whence the town of Potosi is at present near six miles in circuit, and inhabited by many noble families, particularly these concerned in the mines. The air at the mountains is indeed so cold, as to render all the adjacent country remarkably barren; for it produces neither corn, fruit, nor herbs, and yet the town is so plentifully supplied, as to be in want of nothing, the trade for provisions being greater there than in any other place, Lima excepted. Some provinces send the best of their corn and fruit, others their cattle, others their manufactures; while others resort thither with European goods, as to a fure market. A Spanish author declares on the best authority, that, before the year 1638, it appeared by the public accounts that the silver, produced by this mountain, amounted to three hundred ninety-five millions six hundred and nineteen thousand dollars; which in ninety-three years, the time it had then been discovered, amount to forty-one millions two hundred and fifty-five thousand and forty-three dollars per annum. Hence an idea may be formed of the immense trade that has for many years been carried on in this town, which consists intirely of the silver extracted from this mountain, and is still very considerable, though some diminution has been perceived in it's produce.

IN the province of Carangas, which is remarkably cold, is a great number of silver mines constantly worked; among which, one called Turko, is remarkable for the ore named by miners Machacado, the fibres of the silver forming an admirable intertexture with the stones in which they are contained.

contained. Besides, in the barren, sandy deserts, extending towards the coast of the South sea, are found, by digging in the sand, detached lumps of silver, unmixed with any ore or stone, but what adheres to the metal, they having all the appearance of melted silver, with black terrene particles on the outside. The size and figure of these lumps are very different, some weighing about two marks, or sixteen ounces, and some above a hundred marks. These lumps of silver are found in different parts of the same ground, though seldom near each other.

THE manner of separating silver from its marcasite or ore is nearly the same as in gold. They break the ore in the stamping-mill till it is reduced to powder, and then mix it up with mercury into a sort of paste, which they knead in the troughs till the water has by degrees washed away all the earthy particles. After this they strain off part of the mercury from it through a woollen bag to serve again, and the rest is made to evaporate by fire. The silver that remains behind is, last of all, perfectly refined from all heterogeneous matter by a solution of lead, which, exhaling from it, carries off in fumes the copper or other alloy.

ANOTHER part of the riches of Peru are its mines of quicksilver, which afford surprising quantities of that useful mineral. Those of Guanacavelica or Oropeza are the most famous, and are more considerable than the rich mines of Carniola in Europe, of which we have heretofore given an account*. Frezier tells us that the mines of Guancavelica supply all the gold and silver mills in that kingdom; but this seems to be a mistake, since

* See Vol. II. p. 113.

other mines are wrought which produce plenty of quicksilver. The earth containing the quicksilver is of a whitish red, like bricks half burnt, which being pounded is put in an earthen furnace, whose top is vaulted like an oven. They spread it on a layer of common earth, wherewith the grate of the furnace is covered, under which they keep a small fire made of a shrub they call icho, which is of such necessity in these works, that the cutting it for any other use is prohibited for the space of twenty leagues round. In proportion as the pounded mineral heats, the mercury rises volatilized into smoke, which finding no vent through the capital of the furnace, which is exactly luted, escapes through a hole made for that purpose, communicating with several earthen cucurbits, each having a little water at the bottom. By means of this water the smoke is condensed, and the quicksilver precipitates, and is taken out when the operation is over*.—It is remarkable in this process, that the farther the cucurbits are from the furnace, the more they are filled with quicksilver; and they all grow so hot that they would break, if they were not sprinkled from time to time with water.—The workmen employed in this business never hold it long, but become paralytic, and die miserably†.

HAVING been so particular in our account of the gold and silver of the south part of America, it will not be expected we should say much concerning the baser metals, especially as we have

* The reader may see other methods of separating mercury from its ore, in Vol. II. p. 114.

† See more of the effects of mercury in the Note, Vol. II. p. 115.

spoken of them sufficiently in Europe. We may just observe however, that Chili abounds with copper, of which the Spaniards make their great guns for those parts of their dominions, the bells of their churches, and family utensils; so that, since the working of the mines of Chili, no copper has been sent from Spain, as they afford the Indies a sufficient supply of that metal.

As to precious stones, though we have described most of them in our survey of the East Indies*, it is proper to observe, that Peru is noted for its emeralds. The ancients indeed, and Pliny in particular, mistakenly reckoned up various kinds of emeralds†, but the modern naturalists and jewellers only know of two, the Oriental and the Peruvian.

DIAMONDS have lately been discovered in Brasil, and are found in the same manner as the Brazilian gold, in the gullies of torrents, and beds of rivers; but only in particular places, and they are not so universally spread through the country. It is said that they were frequently found in washing the gold, before they were known to be diamonds; and were thrown away with the sand and gravel. It is still remembered, that many large stones, that would have enriched the possessors, passed unregarded through the hands of those who afterwards bore with great impatience the mortifying reflection. However, about forty years ago, a person acquainted with rough diamonds imagined that these pebbles, as they were then thought, were of the same kind: but it is said there was a considerable interval between the first starting of

* See Vol. IV. p. 7—18.

† See Vol. IV. p. 15. *Note.*

this opinion and it's being confirmed by proper trials ; the inhabitants being, with difficulty persuaded to believe that what they had despised could be of such importance ; and, during this interval, a governor is said to have procured a good number of these stones, under the pretence of making use of them in playing at cards, instead of counters. It was, however, at last confirmed by European jewellers consulted, on this occasion, that they were real diamonds ; and many of them not inferior, either in lustre or any other quality, to those of India, except their having generally a yellowish cast. Immediately the Portuguese, in the neighbourhood of the places where they had been found, began to search for them, with great eagerness ; and even hoped to discover considerable masses of them, from their perceiving large rocks of crystal in many of the mountains, from whence came the streams that washed down the diamonds. It was soon, however, represented to his Portuguese majesty, that, if such plenty of diamonds, as was expected, should be found, this would not only debase their value, and ruin all the Europeans who had a quantity of India diamonds in their possession, but render the discovery of no importance. The king, therefore, restrained the general search for them, by erecting a diamond company, with an exclusive charter, who, in consideration of their paying his majesty a certain sum, have the property of all the diamonds found in Brasil : but, to prevent their collecting too large quantities, and thereby reducing their value, are prohibited from employing above eight hundred slaves, in searching for them. And, to secure the company from being defrauded by interlopers, he depopulated a large town in it's neighbourhood, with a considerable district round it ; and obliged the
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the inhabitants, who were said to amount to six thousand, to remove to another part of the country.

VEGETABLES.

THERE is no production of this kind in America that more justly deserves our notice, than the tree which yields the celebrated febrifuge, popularly called the Jesuits bark. It is also called quinquina, kina kina, and palo de calenturas, that is fever-wood, on account of its extraordinary virtue in removing all kinds of intermitting fevers and agues. The tree which produces this noble specific grows only in the inland parts of Peru, on the mountains near Loja or Loxa, in the province of Quito; at least the best sort (for there are different species of this tree) is no where else to be found, according to the account of Mr. Arrot. It is a pretty tall tree, and has a trunk rather bigger than a man's thigh, tapering from the root upwards, and free from branches till near the top, where they shoot out as regularly as if they were lopped, forming with the leaves the figure of a hemisphere. The bark is of a blackish colour on the outside, and sometimes mixed with white spots, from whence commonly grows a kind of moss, which the Spaniards call barbas. Its leaves are much like those of our plum-tree, of a darkish-green colour on the upper side, and reddish on the lower. It bears a red flower, which is succeeded by a sort of pod, inclosing a seed somewhat like a hop-seed; though Dr. Oliver represents its fruit as resembling a chesnut. The soil where the best sort thrives is generally a reddish earth or rocky ground, and frequently on the banks of the rivulets that fall

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from the mountains. Mr. Arrot adds, that it flourishes and bears fruit at the same time all the year round.

THE bark-trees do not grow together in great numbers, but are intermixed with others in the woods. Sometimes indeed it happens that clusters of them are found together, but at present they are much scarcer than in former times, a great many fine large ones having been intirely cut down, in order to come at the bark the more easily. The properest season for cutting the bark is from September to November, the only time in the year that there is some intermission from rain in the mountains. Having discovered a spot where the trees most abound, the workmen build huts near it for themselves, and a large hut to put the bark in, to preserve it from the wet: but they remove it from hence as soon as possible to the nearest plantation or farm-house in the low country to dry, which is done by spreading it abroad in the open air, and turning it frequently. The Indians, who are the cutters, are each provided with a large knife, and a bag that will hold about fifty pounds of green bark. Two of them take one tree, from whence they cut or slice down the bark as far as they can reach from the ground; and then, taking sticks about half a yard long, they tie them to the tree with tough withies at proper distances like the steps of a ladder, always slicing off the bark as far as they can reach, before they fix a new step. Thus they mount to the top, the Indian below gathering what the other cuts; and this they do by turns, going from tree to tree, till their bag is full; which, when there is plenty of trees, is generally a day's work for one Indian. Our author tells us, that, after a tree is stripped of it's bark, it requires eighteen or twenty years to grow again; which is quite different

different from Dr. Oliver's account, who says it grows again in four months *.

MR. ARROT had the curiosity to send a considerable quantity of bark from the woods to the city of Loxa, where he put it into a large open house, and dried it under cover, never exposing it either to the sun or air of the night; imagining that the sun exhaled many of it's fine parts, and that the night-air was very pernicious to it: but he found the colour of the bark, thus cured, not near so bright and lively as that dried in the open air. This best sort of bark, he imagines, will last but a short time, or at least it will be extremely hard to be got, by reason of it's distance from inhabited places, the impenetrability of the woods where it grows, and the small number of Indians to cut it.

It is not certain how the qualities and use of this remarkable bark came first to be known, but it is the common opinion at Loxa that they were known to the Indians before ever the Spaniards came amongst them; and that it was by them applied in the cure of intermitting fevers, which are frequent in those wet parts of Peru. According to the account of the Spaniards, however, the virtues of the Peruvian bark were discovered in the following manner. Near the town of Loxa (say they) was a lake surrounded with quinquina-trees, which, being blown down or accidentally thrown into the lake, communicated a bitter taste to the water, so that the inhabitants, who

* Dr. Oliver had his account of the bark-tree from an apothecary at Cadiz, who had been in Peru; but Mr. Arrot relates what he himself had observed and been told whilst he lived in that country. Who is most to be credited, we leave to the reader's judgment.

used to drink it, could use it no longer. But a certain Indian, who had a violent fever upon him, and consequently an intense thirst, finding no other water, was forced to drink of this, by which he was perfectly cured. He related this accident to some of his neighbours, and several persons afflicted with fevers made the same experiment with the same success. Upon this they set themselves to discover what had given this febrifugous quality to the water of the lake; and found in the first place that a great number of trees had fallen into it; and, secondly, that in a course of years, these trees being rotted in the water, it lost it's bitter taste, and at the same time it's virtue; whence they concluded, that it's quality was owing to the trees. Then they infused all the parts of these trees in water, and found that their whole efficacy resided in the bark. This medicine, however, remained a secret to the Spaniards, till the year 1640, when it was discovered by a soldier, who by it's means had the good fortune to cure the vice-queen of Peru of an intermitting fever, which had baffled the skill of her physicians. From this time the Spaniards began to use it with wonderful success; and in 1649 father de Lugo, a Jesuit, then procurator general of his order, and afterwards cardinal, brought it to Rome; upon which the society of Jesuits soon raised it's reputation in Europe, and got a great deal of money in a short time, selling it for more than it's weight in gold, and never parting with it but in powder, in order to disguise it the better. At this juncture the physicians were divided with respect to the Peruvian bark, some looking on it as a divine medicine, whilst others believed it dangerous, and even fatal in many cases; but it's reputation was only lost through the ignorance of the manner of preparing
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and prescribing it; for, about the year 1679, Mr. Talbot, an English physician, brought it into vogue, by the great number of cures he wrought about the court and city of Paris, with the powder prepared after his manner; the secret whereof was afterwards made public, by the munificence of Louis XIV, who rewarded Talbot for the communication with five thousand crowns.

THE reputation indeed, which this medicine has universally obtained, has been chiefly owing to the judicious and successful experiments made by the English physicians: But it still has its enemies, who pretend that it brings on violent relapses, or new and incurable diseases; such as cachexies, tumours of the feet, dropries, obstinate costiveness, oppression of the præcordia, hypochondriac and hysteric disorders, slow and hectic fevers, accompanied with a loss of strength and appetite, and sometimes convulsions and epilepsies in children. But it is certain that the Peruvian bark, exhibited duly and in conjunction with other suitable remedies, has a tendency to remove the causes of fevers by promoting perspiration, and restoring the due tone of the solids.

It ought never to be given in large quantities, but rather at several times, one or two scruples only on the intercalary day, every three hours after the fit, drinking after it a sufficient quantity of water, broth, or beer. Besides the peculiar febrifuge quality of the bark, it is of peculiar service in stopping the progress and perfecting the cure of gangrenes and mortifications.

THIS noble medicine is sold either in bark or in powder. If bought in the bark, it must be chosen dry and compact, such as has never been damaged by wet, and is not too easily reduced into powder by breaking. The small blackish barks,

shagreened without, and reddish within, of a bitter disagreeable taste, are the most esteemed. But the little sort, which curls up like sticks of cinnamon, and is supposed to be peeled off the branches, Mr. Arrot tells us is only the bark of the younger trees, which twists up in that manner on account of it's thinness; for he says the bark of the branches would not answer the trouble and expence of cutting.—As to the powder, it ought to be well sifted, and bought of persons that may be trusted, it being often sophisticated, and the cheat not readily discovered.

THERE is another bark called Winter's bark, or Winter's cinnamon, because brought by captain Winter from the Streights of Magellan, where the tree grows in great abundance: but it is to be observed, that the wild cinnamon sold in the shops is not the true *Cortex Winteranus*, though passed off under that name. There are barks of different trees, growing in very distant places, by outward appearance seeming quite different from each other, and even alike with regard to taste, so that they may be used as a *succedaneum* to each other; but the true Winter's bark is much to be valued beyond the false, which is generally sold in the shops, being far more aromatic. It is resolvent, discutient, and sub-astringent; on which account it is successfully administered in disorders of the stomach, crudities, nauseas, diarrhoeas, and excessive vomitings. To strengthen the stomach, it is likewise used in the declension and at the end of intermitting fevers; and it is reckoned beneficial to scorbutic patients.

WE ought not to omit another excellent root growing plentifully in Brasil and Peru, namely, *sarsaparilla*, which began to be much celebrated about the same time with the China root, as appears
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from an epistle of Vesalius. The root divides itself into a great number of filaments, six or seven feet long, brownish without, and white within, only marked with two red streaks; and its branches creep along the ground, or up the trunks of other trees like ivy. Its chief use is in decoctions and potions for the venereal disease, and in some cases it is reckoned to exceed guaiacum itself, especially when the patient is afflicted with rheumatic pains, owing their original to the venereal infection. It is prepared by cutting two ounces of the root into small bits, and macerating them a whole day in six pints of water; which are afterwards to be boiled over a gentle fire in a double vessel well closed with a lid, till one third or one half be evaporated. Of this decoction the patient is to take a glass that will hold ten ounces, very early in bed; and the course is to be continued for twenty or four and twenty days.

IN the southern parts of America we find several trees which furnish us with healing medicines, particularly the Peruvian balsam. Of this there are two kinds, the white and the black; but the former is accounted best, and is by way of eminence called balsam of incision, because flowing from a large tree upon making incisions in the bark. This species is limpid, of the consistence of turpentine, of a fragrant smell, and much scarcer and dearer than the black sort; but it is frequently adulterated with Venice turpentine. We have large quantities of the black sort imported, which is prepared by boiling the branches, bark, and leaves of the trees; but this is likewise often adulterated, which however may be known by its being thick and coagulated, and wanting its penetrating taste and smell. The true balsam of Peru, if used internally, restores lost and impaired strength,

strength, and, being very friendly to the nervous system, powerfully contributes to remove the disorders arising from it's weakness. The black Peruvian balsam, according to Geoffrey, is also of a warming and strengthening nature, comforting the brain and nerves; and it is beneficial in asthma, the cholic, and pains of the stomach and intestines. Used externally, it alleviates the cramp, relieves all kinds of convulsions, old aches and pains, and contractions of the sinews. In cuts and green wounds it is also serviceable.

THE balsam of Capivi is produced from a tree growing in Brasil, and brought to us from Rio de Janeiro and other places in earthen vessels. There are two sorts of it, the one very limpid, the other pretty thick, but the difference depends upon the different seasons of gathering it. Hoffman esteems the limpid kind both for internal and external purposes, it being an excellent liniment for the consolidation of wounds and ulcers, and for strengthening the nervous parts after they have been weakened by any disease. It is also beneficial when applied to parts that have been affected with the gout, and thereby rendered unfit for motion. — This balsam is used by the Jews to stop the blood after circumcision.

To these we may add the balsam of Tolu, the produce of a tree growing in Terra Firma, of a tough resinous consistence, of a yellowish colour, of an highly fragrant smell, and aromatic taste. This is an excellent pectoral medicine, and consequently of great service in all disorders of the lungs, as coughs, asthma, and consumptions; and what renders it still more valuable is, that it has no nauseous oily taste, which is the case of most other native balsams. With sugar and the yolk of an egg it makes an agreeable emulsion; and it is reckoned restorative if taken inwardly, and deterges
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and consolidates wounds if applied externally. It strengthens the nerves, and is good against a rheumatism and sciatica. In taste and smell it resembles the balm of Gilead, and, as it grows old, it becomes friable, and assumes the consistence of a dry balsam.

THE grenadilla resembles, in shape, a hen's egg, but is larger. The outside of the shell is smooth, glossy, and of a faint carnation colour; and the inside white and soft; the shell containing a viscous liquid substance, full of very small and delicate grains, less hard than those of the pomegranate, and is separated from the shell by a fine transparent membrane. This fruit has a delightful sweetness, blended with acidity, very cordial and refreshing, and so wholesome, that the indulgence of one's appetite is not attended with the least danger.

THE chirimoya is universally allowed to be one of the most delicious fruits in the world. Its dimensions are various, it being from one to five inches in diameter. Its figure is imperfectly round, it being flatted towards the stalk, where it forms a kind of navel; but all the other parts are nearly circular. It is covered with a thin, soft shell, that adheres so closely to the pulp, as not to be separated from it without a knife. The outward coat is green, variegated with prominent veins, forming all over it a kind of net-work. The pulp, which is white, contains a large quantity of juice, resembling honey, of a sweet taste, mixed with a gentle acid, of a most exquisite flavour. The seeds are formed in several parts of the pulp, and are somewhat flat. The tree is high and tufted, the stem large and round; but with some inequalities, and is full of elliptic leaves, terminating in a point. The blossom is nearly of the same colour as the leaves, which is a darkish green; and,

though far from being beautiful, is remarkable for its incomparable fragrance; whence these flowers are so much admired by the ladies that they purchase them at any price. The two fruits last mentioned are the produce of Quito, in Peru.

THE cuca is an herb so highly esteemed by the Indians in some provinces of Peru, that they would part with any kind of provisions, the most valuable metals, gems, or any thing else, to obtain it. It grows on a weak stem, which supports itself by twisting round another stronger vegetable; and its leaf, which is about an inch, or an inch and an half, or two inches in length, is extremely smooth. The Indians make use of it, for chewing, mixing it with a kind of chalk, or whitish earth called mambi. They put into their mouths a few leaves of cuca, and a proper quantity of mambi; and, chewing them together, at first spit out the saliva, but afterwards swallow it. This herb is so nutritive and invigorating, that they labour whole days without any thing else; and, on the want of it, find a decay in their strength; it also preserves the teeth sound, and fortifies the stomach. Great quantities of this herb are cultivated by the Indians in the southern provinces of Peru, and it makes no small article of trade; a great deal of it being particularly carried to the mine-towns, that the owners of the mines may furnish the Indians with it, who otherwise could not be brought to work, or would not have strength to go through it. This plant is doubtless the same with the betel of the East-Indies, where it is used in the same manner.

IN the most southern parts of Popayan are certain trees, which yield a resin called mopa-mopa, of which is made a varnish, which is not only extremely beautiful, but will bear boiling water, and
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even acids. The method of applying it is to dissolve some of the resin in ones mouth, and then wet the pencil with it: afterwards, it is dipped in the colour to be laid on; and, when dried, has all the lustre of the Chinese lac; but with this superior quality, that it never wears off, nor becomes moist, though rubbed with spittle. Hence the cabbins, tables, and other furniture, made by the Indians of this country, are carried to Quito, where they are highly valued.

THERE is still to be mentioned a very celebrated plant of the shrub kind growing in some parts of South America, especially Paraguay, by which name it is called, through better known amongst us under the denomination of South-sea tea. It's usual height is about a foot and a half, it's branches are very slender, and it's leaves like those of sena. It may be looked upon indeed as a sort of Occidental tea, which, like the Oriental, is infused in hot water, and communicates to it a colour and smell nearly like those of the best tea brought from the East-Indies. Of this plant there are two kinds, the one called paraguay, the other camini, which last is most esteemed, and sold for a third more than the other. The first is chiefly used by domestics and slaves, but the latter is the drink of the richest people; and both are of so much use, and esteemed of such necessity, that no-body in that part of America will live without them. In the mines of Potosi (as we have already observed) the poor slaves could not live without a constant supply of Paraguay, which is their remedy against the mineral steams, that otherwise would suffocate them; and it is said that no servant will engage himself with a master but on condition that he have paraguay for his usual drink.—This plant makes a very considerable

considerable article in the commerce of that part of the world, and passes almost wholly through the hands of the Jesuits. The use of it began once to obtain in England, and seemed to be approved of as well as tea; but of late years it has not been much regarded. The preparation of it, and the making it into drink, is much the same with that of tea, except that both the leaves and wood are used, and the liquor drank immediately out of the vessel it is made in, which the company suck through a silver or glass tube, handed round from one to another. It is farther to be observed, that, besides the virtues of the Eastern tea, the Americans attribute another to theirs, viz. that of purifying all kinds of water, how foul and corrupt soever; so that, when they cross the deserts from Buenos Ayres to Peru and Chili, they make use of it to sweeten the bad water they meet with, and drink it without any injury. In the scurvy and putrid fevers it is also reckoned a sovereign remedy.

NOR should we forget the American wood called brasil, commonly supposed to have had it's name from that country, though Huet shews it was known many years before Brasil was discovered. It is variously denominated, according to the places whence it is brought, as Fernambuco, Japan, the Antilles, &c. but it always grows in a dry barren soil, and even in the middle of rocks. The tree is tall, usually crooked and knotty, and has a bark of a surprising thickness. It bears flowers of a very beautiful red, which smell agreeably, and are said to strengthen the brain. The wood itself is very heavy, crackles much in the fire, and scarce raises any smoke, by reason of it's extreme dryness. That of Fernambuco is esteemed the best, and it is to be chosen in thick pieces, close, sound,

found, and such as being chewed tastes something like sugar.—It takes a good polish, and is much used in turned works, but more frequently in dying, as it gives a red colour, though none of the most lasting. In medicine it is reckoned to mitigate the heat of fevers, and is strengthening and restraining.

MANY more productions of the vegetable kind in this part of the world are very remarkable, particularly a large prickly shrub, as thick as a man's leg, and growing to the height of ten or twelve feet, but bearing neither leaf nor fruit.—The mammee is a tall strait-bodied tree, without knots or limbs for sixty or seventy feet, but afterwards spreading into several small branches, growing thick and close together. It's bark is of a dark-grey colour, thick and rough; it's fruit bigger than a quince, round, and covered with a thick rind. When the fruit is ripe, the rind is yellow, and will peel off like leather, but before it is brittle. Under the rind the pulp is also yellow, and in the middle are two large stones, flattish, and each of them much bigger than an almond. The fruit smells well, and the taste is not disagreeable.

IN Terra Firma there are several sorts of mangrove trees, which we think it proper to take notice of, besides those we have mentioned in Africa. They are black, red, and white, the first of which is largest, being as big as many of our oaks, and to the height of about twenty feet very serviceable timber, but extraordinary heavy, and therefore not much used in building.—The red mangrove grows commonly by the sea-side, or by creeks and rivers, and proceeds from several roots, which, about eight or ten feet from the ground, join into one trunk or body, so that the tree seems to be supported by so many artificial stakes. The
inside

inside of the bark is red, and is much used in the West-Indies for tanning of leather.—The white mangrove does not grow so large as the other sort, nor is it of any great use.

WE shall conclude this article with the description of a very useful tree, viz. the cacao or chocolate nut-tree, which is found in several parts of the West-Indies, but no where so plentifully as on the coast of the Carracas. This tree nearly resembles our dwarf apple-tree both in body and branches; but the leaf, which is of a deep green, is considerably broader and longer. The nuts, which are of the colour and about the size of an almond, hang fifteen or sixteen together by a small stringy film, inclosed in a pod shaped like a large cucumber, and pointed at the upper end. When the pod is ripe, it is of a beautiful yellow colour, intermixed with blood-red streaks; but when dried it shrivels up, and turns to a deep brown. Others tell us that each pod contains from twenty to thirty nuts, and that a thriving tree generally yields from two to eight pounds of nuts in a year; which, when ripe, are cut down and laid in heaps to sweat for three or four days in the pods, then taken out, covered with plantain leaves, and so left to sweat a fortnight or three weeks longer. After this they are dried three or four weeks in the sun, and then become of a reddish colour.

THE tree is difficult to cultivate, and a plantain is placed by every cacao-tree, because it delights in shade. They begin to bear at three, four, and five years old, and come to perfection in fifteen years; but frequently die before that time. They are, however the most profitable trees in the world, for we are told some of the Spaniards make five thousand pounds sterling per annum, from one large plantation of cacaos; and an acre of them in Jamaica
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(from whence we receive more nuts, than from all the rest of our plantations) has cleared above two hundred pounds in a year. In some parts of America, the nuts are used by the natives as money, twelve or fourteen being esteemed equivalent to a Spanish real, or about seven-pence sterling.

WHAT renders the cacao-nut most famous is it's being the principal ingredient in chocolate, a factitious substance first brought from America into Europe by the Spaniards about the beginning of the last century. Some dissolve this substance in water, others in milk, and others in wine; but water seems to be the best vehicle for it, as the most proper to distribute it's nutritive parts, and to promote digestion. The composition of chocolate makes it chiefly proper for persons of cold constitutions, for old people, for those who have their strength impaired by repeated watchings, and for those who travel in cold mornings. As it is of an oily and tenacious nature, Dr. Cheyne, in his Essay on Health, thinks it should not be used by the weak and infirm, either as an aliment or a medicine; but he grants that it may produce all the effects of a salutary food in vigorous and strong constitutions. It is confirmed by the experience of many physicians, that, in hectic, scorbutic, and catarrhus disorders, chocolate is a wonderful remedy, having wrought a cure when all other means have proved ineffectual: And Hoffman affirms, that chocolate prepared with water, contributes much to the cure of melancholic disorders, arising from too weak and lax a state of the nerves, especially if we add to it a few drops of essence of amber. Dr. Stubbs, in the Philosophical Transactions, affirms, (and Dr. James is of the same opinion) that well-prepared chocolate is an excellent diet for those who are scorbutic, afflicted with the stone or arthritic pains, and to prevent convulsions; and yet

yet some of the best physicians have observed that drinking chocolate to excess contributes to the formation of stones, especially in the gall-bladder. It is agreed, however, that a man in perfect health may drink as much chocolate as he has an appetite for, provided he finds himself refreshed, and his stomach not over-loaded. In hot and sanguine constitutions the immoderate use of this liquor, by inspissating the blood and rendering it less fit for circulation, produces inflammations of the viscera, fevers, and apoplexies. On account of the quantity of sugar that enters the composition of chocolate, it ought to be avoided by those who are subject to hypochondriac flatulencies; and the disadvantages arising from the immoderate use of this drink, considered as prepared with warm water, are plain to every one who reflects, that the frequent use of warm water relaxes the organs of digestion, and the solids in general, and must consequently prove pernicious.

THE method of making chocolate, now used by the Spaniards in America, is first to dry the fruit in the sun, then to take out the kernels and roast them at the fire in an iron pan pierced full of holes, and afterwards grind them on a marble-stone, till they are brought to the consistence of a paste, mixing with them a quantity of sugar, some long pepper, and vanilla, or vanelloes, a little black seed, that gives the chocolate an agreeable flavour. Some add cinnamon, cloves, and anise, and even musk and ambergrise, if they love perfumes.—What is made in Spain differs something from that made in the West-Indies, two or three kinds of flowers being added, besides hazle-nuts and almonds; and they frequently work their paste with orange-water, which they think gives it a greater firmness and consistence. Sometimes

Sometimes the cakes are made up of the nut without any admixture, those that use it being left to add what quantity they please of sugar, cinnamon, &c. And this plain method is usually followed in England, except that sometimes sugar and sometimes vanelloes are added, scarce any other ingredients being known amongst us.—It is said that in New Spain there is such a quantity of chocolate made as to use annually twelve millions of pounds of sugar.

HERE is a species of canes or reeds remarkable for their length, their thickness, and the water contained in their tubes. They are usually between twelve and sixteen yards long; and, though there is some difference in their size, the largest are not above six inches in diameter. The wood or side of the tube is about half an inch in thickness, so that, when the cane is split and opened, it is made to form a board near a foot and a half in breadth. From the time of their first appearance, till they attain their full perfection, many of the tubes contain a quantity of water; and, what is very remarkable, at full moon, they are either quite, or very nearly full; and, with the decrease of the moon, the water ebbs. During the decrease, it appears turbid, and at the full is as clear as crystal. Yet the water is not found in all the joints, one having water, and others not, alternately. These canes, which are found, not only in South America, but in the West-Indies, are an admirable proof of the indulgent care of Providence, by furnishing the traveller, in those hot countries, when fainting with heat, and at a distance from springs, or when they are dried up by the excessive heat, with a refreshing draught, to quench his thirst. This water is also said to be an excellent preservative against the
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ill consequences of bruises, to which the traveller is also exposed ; and is therefore drank in South America by those who come from the mountains, where such accidents are in a manner unavoidable. These canes or reeds, being cut, are left to dry, whence they acquire such a degree of strength as to serve either for rafters, beams, flooring, or even masts for small vessels called balzas. They also serve as poles for litters, and for an infinite number of other uses.

THE next plant we shall mention is the bejuco, a kind of woody cordage, of which there are two sorts ; one of which grows from the earth, and twines round the trees ; the other strikes it's root into certain trees, and from thence derives it's nourishment. Both kinds, after growing to a great height, incline again to the earth, on which they creep, till, meeting with another tree, they climb to the top of it, as before, and then again renew their inclination towards the earth ; and thus form a labyrinth of ligatures. Some are even seen extended like a cord, from the top of one tree to another. They are so extremely flexible, that no bending or twisting can break them. The slenderest of them are between a quarter and half an inch in diameter ; but the most common size, is a little above half an inch : there are, indeed others much thicker, but these are of little or no use, on account of the hardness contracted in their long growth. These may be justly considered as ropes formed by the hand of nature. They are chiefly used for lashing, tying, or fastening different things together ; and, by twisting several of them in the manner of our ropes, they are made to form bridges, and even cables and hawsers for balzas and other vessels ; and are found by experience to last a long time in the water.

ANOTHER

ANOTHER remarkable vegetable is the vijahua, which is also found in South America, and is a leaf generally five feet in length, and two and a half in breadth, growing wild, without any stem. The principal rib in the middle is near half an inch broad; but all the other parts are perfectly soft and smooth. The under side is green, and the upper white, covered with a fine, viscid down. It is commonly used for covering houses; and also serves for packing up salt, fish, and other goods, sent to the mountains, to secure them from the rain.

A N I M A L S.

THE new world affords the curious naturalist a vast variety of remarkable animals, and especially the Southern parts of it, where we find the mantiger, described by Dr. Tyson as about the bigness of a mastiff-dog, with a head fourteen inches long, and something resembling that of a horse. It has large nostrils, and it's nose is depressed lower than the upper jaw. It has a large tuft of hair on the forehead and under the chin, and it's fore-feet exactly resemble hands, having long and thick fingers and a thumb, the nails whereof are flat, but those of the hinder toes are not so. The fore-part of it's body and the inside of it's arms and legs are almost bare of hair, but the outside is covered with hair, which is of a motley brown and olive colour. It has a navel and paps on the breast, feeds chiefly on fruit, and will sit and support itself by a stick in one hand, and drink out of a cup held in the other. It has two long tusks in the upper jaw, has no tail, and is a very fierce and lascivious animal.

THE

THE cuandu of Brasil, according to Dr. Tyson, is a sort of porcupine, described by Margrave and Nieuhoff, which has but four toes on the fore feet and five on the hinder ones; so that, as Margrave observes, for want of what may be called the thumb, it is but slow in climbing trees; but has a way of twisting it's tail about a bough, and thereby frequently saves itself from falling.—The tamandua, another animal of Brasil, has only four toes before, but five behind, and also makes use of his tail in climbing.

THE coati mundi of Brasil is represented differently by different writers, but is usually said to have a snout about a foot long, small eyes like a pig, round ears like a rat, and hands like those of a monkey. It's hair is short, rough, and of a blackish colour on the back, the rest of the body having a mixture of black and red. This animal is ranked by Dr. Tyson among the number of those he chuses rather to call four-handed than four-footed, of which some have no thumb on the fore feet, and others none on the hinder feet. Of the former sort he reckons the vantrevan, (as it was called by the person who shewed it in London) which is a beautiful creature, has a long tail, and is very brisk and nimble.

THE sloth is a very remarkable animal; it's body is short, it's head small, and it's fur long, thick, and of a greyish green; so that, when seen on the bough of a tree, it appears only like an excrescence or cluster of moss. It is of about the size of a cat, but it's legs and neck are short, and it's long, thick covering renders it so shapeless, that it seems only an irregular lump of living matter. It's little head, which is remarkably ugly, stands between it's shoulders. The face has some resemblance of that of a monkey, but it's small
heavy

heavy eyes are always half closed, and it has no appearance of ears. It's feet are flat and very narrow, but armed with sharp claws for striking deep into the bark of trees. This animal never changes it's place, but when compelled by necessity. As upon the ground it would be a prey to every other animal, it's constant residence is on a tree, where it is safe from all animals, but those that climb the trees for the sake of the birds. The leaves and tender part of a tree are it's food, and serve it both for meat and drink. It never moves to another branch, till it has devoured all the nourishment upon that where it is stationed, nor from one to another till the first is wholly wasted. It is remarkable that the sloth always ascends to the top of a tree, only baiting as he goes, before he begins his devastations; for, was it to begin eating upwards, when it had devoured all, it would be half starved in climbing down from the top of a dead tree. But this is not all, the hayock which one sloth makes on the largest tree, is easily seen, for he eats not only the leaves, but all the buds and bark, leaving only a dead branch; so that, unless the same thing might happen by accident, this would betray him. It does so happen, for trees always die at the top first, and so gradually downward. Thus this animal is wonderfully taught; as it feeds the tree decays; but it's decay is in the course of nature. The decay spreads downward, and, when he has eaten the last of his provision, he is near the ground, and has only to walk to another tree; but, if it is at any distance, his motion is so slow, that he grows quite lean in the expedition.

As the female brings forth her young in the hollow of a tree, she is led by the same wonderful instinct to conduct them to the topmost branches, as soon as they can crawl out. When she is
big

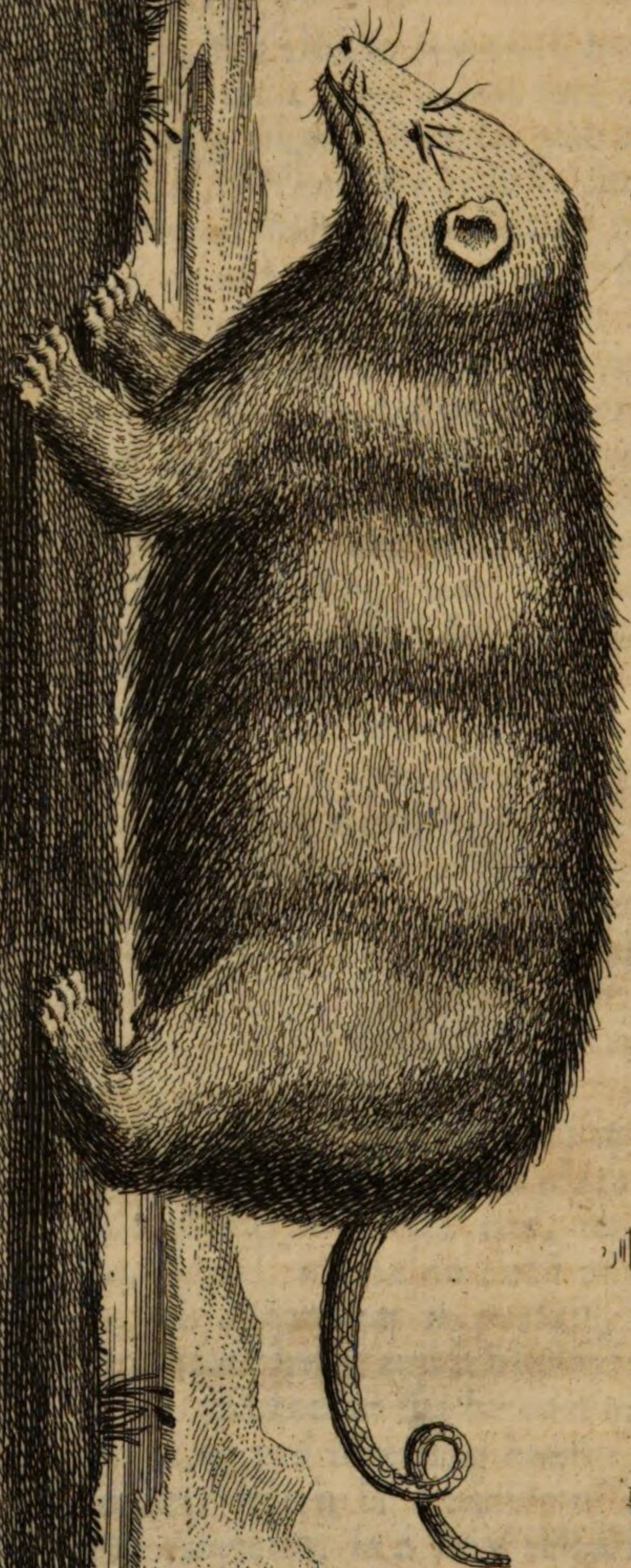
big with young, she climbs some old hollow tree, and having fixed on a convenient spot for them, ascends to the very highest bough, and there feeds faster than usual. When she is full, she descends with unaccustomed haste, and brings forth one, two, or three young ones. It is well she is full fed, for she is to support these with her milk till they can crawl out, without having any supply herself. When she retires for this purpose, she is round and fleshy, but a mere skeleton when she comes out. She crawls as well as she can, followed by her young, to the part where she left off feeding; nor will she feed by the way, however prompted by her hunger and laziness.

THE sloth is the most timorous of all creatures, and with reason, for it can neither fight nor fly. While it is on its little journey on the ground, the tread of an human foot puts it into terrors: it trembles: the head is turned about every way, and the mouth is open to cry like a young kitten. Insignificant as this creature appears, says an ingenious author, there is a special providence visibly in its form and preservation. Not designed for walking, its claws enable it to climb: helpless as it is, the universal Provider has assigned it a place of safety, where it finds plenty of food; and, as it cannot easily seek for drink, it has no need of any. To render it the less obnoxious to pursuit, its colour secures it even from view; and its amazing instinct of feeding, from the top to the bottom of the tree, proves a designing and directing hand.

THE opossum, which is a native of Brasil and other parts of America, is a very remarkable animal, in shape and size like a badger, but of a lighter colour, and with a longer tail. What is most wonderful, in this creature, is the bag or
purse

The Opium

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purse in the skin of it's belly, to which it's young ones retire and hide themselves in case of danger. In the male opossum however this pouch is not discernible, only the skin in that place, according to Dr. Tyson's observation, seemed to be looser, so that he could thrust it in with his finger, and by turning it round form a sort of bag, but which, on withdrawing his finger, returned to it's former position; and for this reason the doctor leaves it as an uncertain point, to be determined by those who live where these animals are bred, whether this part of the skin is capable of being formed upon occasion into a pouch, and whether they ever observe the male opossum to receive the young as the female does*.

PERHAPS the reader will not be displeased if we are a little more particular in our account of an animal so remarkable, which we shall chiefly take from the doctor already cited, and Mr. Cowper, who have both published their anatomical observations on the opossum in the Philosophical Transactions. That which Dr. Tyson dissected (whereof we have given a figure drawn from the life) measured two feet seven inches from the extremity of the nose to the tip of the tail, the length of the head was six inches, that of the tail twelve, and the circumference of the body fifteen inches and a half when dead, but, when alive and well, it seemed much thicker. It's fore legs were six inches long, the hinder ones only four and a half, and

* Dr. Derham, speaking of the care that animals have of their young, mentions the opossum and it's curious bag, quoting Dr. Tyson, as we have done; who also takes notice of the dog-fish, (from Oppian) which upon any storm or danger receives it's young ones into it's belly: and the same is said of the squatina and glaucus.

the tail near the root was three inches in compass. The apertures of the eye-lids were not horizontal, but lying in a straight line from the eyes to the nose. The ears were not sharp, but of a roundish figure, and about an inch and an half in length, which was almost the dimension of the mouth when opened, from one corner to the extremity of the nose. The hinder feet had four fingers armed with long crooked nails, and a perfect thumb, set off at a distance from the range of the other fingers, as in a human creature; and the fore feet had five long claws or fingers, equally ranged with each other, and a hooked nail at the end of each finger. This formation of the legs, feet, and nails seems very advantageous to the animal in climbing up trees, which it does very nimbly in pursuit of birds, a prey it is extremely fond of, though that is not it's only food. These fingers and claws are naked, and without hair, the skin being of a reddish colour. The palms, if dilated, which the creature does in climbing, are large, but so contrived as to be capable of contraction, which is likewise the case in it's walking; and, that the palms might be the better defended from injury, at the setting on of each toe there is in the palms a protuberant, fleshy, and almost cartilaginous body. In feeding it makes use of it's fore feet to bring the food to it's mouth, as creatures of the monkey and squirrel kind. The tail is without hair, except for a little way near the root, from whence it tapers to the extremity, and is covered with a regular order of small whitish scales, which for the most part are of an oblong hexagonal figure. Between each there is observable a small skin or membrane, in which they are fixed, and which is of a darker colour. The ears of this creature are bare and without hair, and, though

though soft and slender, and in colour and substance almost resembling the wing of a bat, are erect, and of an oval figure. It's upper jaw is somewhat longer than the under, it's eyes small, black, vivid, and exerted when alive, but very much sunk when dead. The neck is short, the breast broad, and it has whiskers like those of a cat. On it's back and sides it is of an ash-colour, or dappled with black hairs in spots intermixed with white; but it's belly is more of an amber colour.

UNDER the belly, between the two hinder legs, is a slit or aperture, about two inches long, but capable of greater extension, by dilating it with the fingers; and this the animal can so exactly close and contract, that the eye does not readily discern it. On each side of it there is a reduplication of the skin inwards, which forms a hairy bag, though the hairs are very thinly set, so that the skin is almost every-where to be discovered. This is the marsupium, bag, or purse, already spoken of, which all authors agree is intended to preserve the animal's young, and secure them against danger; and the contrivance of nature in forming and adapting this part to that end is admirable, there being two strong bones, not to be met with in any other skeleton, which have no motion nearer or farther from each other, but stand always at an equal distance; and these bones are furnished with four pair of muscles, over which runs another pair, which perform the office of a pulley. In the male opossum, which Mr. Cowper dissected, the marsupium was not perceptible, nor the muscles belonging to it; but that gentleman, as well as Dr. Tyson, observed the bones just mentioned, and muscles running from them to the hinder legs, which are undoubtedly serviceable to the creature in drawing up it's
 N 2 body.

body. This marsupium, the doctor found, is a membranous body, not very thick, though consisting of several coats, which perform the office of motion and secretion; for the cavity of the pouch is somewhat hairy, and the doctor observed the hairs matted together by a yellowish substance, which oozed out of the cutaneous glands. This liquor, discharged into the pouch from the glandulous coat, was of a strong scent, and had more of the peculiar foetor of the animal than any part besides; but, after the skin, together with the pouch, had been kept for some days, and was grown dry, there was so great an alteration in the smell, that what was before very disagreeable, was now become a perfect perfume, resembling exactly the smell of musk. In this pouch most authors place the mammæ or teats, but Dr. Tyson found none, nor even on the outward skin, as is usual in other multiparous animals; though he imagines the opossum, the subject of his dissection, might never have had a litter, and for that reason the teats might escape his notice.

THE opossum, being a carnivorous animal, and particularly fond of birds, is endued by nature with a faculty of twisting it's tail about a small branch of a tree, and thereby stretching itself out to rob a nest, or obtain it's desired food: nay, by this means it may be said to fly; for, hanging thus by the tail, and swinging it's body to and fro, it can fling itself into a neighbouring tree, where it's tail is sure to fasten on the first bough it meets with, if it otherwise misses it's footing; and, it's hinder feet being made like hands, and furnished with a thumb, it thereby the more readily raises it's body.

WE come now to an animal of such a magnitude and strength, as, if not attested by authors of unquestionable veracity, we should not have ventured to describe or mention. This is the cuntur or condor of Peru, which Sir Hans Sloane (from the account of captain Strong, commander of a South-Sea ship) has taken notice of in the Philosophical Transactions. This is an animal of the feathered race, and of such an amazing bigness, that the captain's men, who shot one and measured it, found it was sixteen feet from the extremity of one wing to the other. One of it's feathers was two feet four inches long, the quill-part near six inches, it's weight three drams and above seventeen grains, and was concave on one side and convex on the other. The seamen shot it as it sat on a clift by the sea-side, and eat it, taking it for a species of turkey. They were told by the Spaniards that they were afraid of these birds, lest they should prey upon or injure their children.

TO this account it seems proper to add the testimony of Acoſta and Garcilasso de la Vega, who say that the fowls corruptly called condor by the Spaniards measure fifteen or sixteen feet from the end of one wing to the other; and that their beak is strong enough to tear off the hide or rip open the bowels of an ox. Two of them will attack a cow or bull, and devour him; and it has happened that one of them has assaulted and eaten boys of ten or twelve years of age. But it is observed, that nature, to temper and allay their fierceness, has denied them the talons which are given to the eagle, their feet being tipped with claws like a hen. They are black and white, like a magpye, and on the fore part of their head have a comb not pointed like that of a cock,

but rather even, in the form of a razor. It is very well, says our author, there are but few of them, otherwise they would much destroy the cattle *.

DE ULLOA observes, that the condor resembles in it's colours and appearance the gallinazo, and sometimes soars from the highest mountains, so as to be almost out of sight. As it is seldom seen in low places, a subtile air seems best to agree with it; though some that have been tamed when young, live in the villages and plantations. They are extremely carnivorous, and are frequently known to fly away with the lambs that feed on the heaths upon the sides of the mountains. This our author confirms from his own observation; for, seeing, on a hill adjoining to one on which he stood, a flock of sheep in great confusion, he perceived a condor flying upwards from them, with a lamb in it's claws. When at some height he dropped it; but, following it, took it up, and let it fall a second time, and then winged his way out of sight, for fear of the Indians, who, at the cry of the boys and barking of the dogs, were running towards the place. On some of the mountains, this bird is frequently seen; and, as it preys on the flocks, the Indians make use of all their endeavours to catch it. One of these ways is killing an old cow, or some other beast, and rubbing the flesh with the

* Dr. Derham observes, that creatures less useful, or by their voracity pernicious, have commonly fewer young, or seldomer bring forth; of which many instances might be given in voracious beasts and birds, but there is one (says he) very peculiar, which is the cuntur of Peru, a most pernicious bird, and therefore very rare, being seldom seen, and only just enough of them to keep up the species, but not to overcharge the world.

juice of some potent herbs, which they afterwards carry away; otherwise the bird would not touch the flesh; and, to take off the smell, they bury the flesh till it becomes putrid, and then expose it; when the condors allured by the smell of the carcass fly to it, and feed on it greedily; till, the herbs operating, they become senseless and incapable of motion; when the Indians seizing the opportunity, destroy them. They likewise catch them with springs, laid near some flesh; but such is the strength of this bird, that sometimes, with the stroke of it's wing, it knocks down the man who approaches it. Their wing also serves the condors as a shield, by which they ward off blows, without receiving any visible hurt.

THE gallinazo is about the size of a pea-hen, but the head and neck, are somewhat larger. From the crop to the base of the bill, it has, instead of feathers, a wrinkled, rough, glandulous skin, covered with small warts and tubercles. It's feathers are black, as is also it's skin: it's bill is well proportioned, strong, and a little crooked. These birds are so numerous and tame, that, in the city of Carthagena, it is not uncommon to see the ridges of the houses covered with them; and they have so quick a scent, that they are said to smell a dead body at the distance of ten or twelve miles, and never leave it till they have intirely reduced it to a skeleton. Though their legs are strong and well-proportioned, they hop along on the ground, in a very awkward manner; for they have the toes forward, turning inwards, and one in the inside turning a little backwards; so that the feet interfere, which occasions their walking so badly. Each toe has long and thick claws. At their first rising they fly heavily, but soon after dart out of sight. These birds are of great service, on account

of their picking up all kinds of filth, greedily devouring any dead animal, the eggs of the alligators, and whatever is most offensive: hence their multiplicity, in such hot climates, is a merciful dispensation of Providence, as otherwise the putrefaction, caused by the excessive heat, would render the air unfit for human beings.

THERE is another species of these birds, somewhat larger than the former. In some of these, the head, and part of the neck, are white; in some red, and in others a mixture of both these colours. At a small distance from the crop, they have a ruff of white feathers, and are equally fierce and carnivorous with the former. These are called the kings of the gallinazoes, they being few in number, and it being observed, that, when one of them has fastened on a dead beast, none of the other approach, till he has first eaten the eyes, which is generally the part he begins with first, and is gone to another place, when they all flock to the prey.

IN Brasil we find a great number of curious birds, particularly the anhimá, or unicorn bird, so called because it has a horn two or three inches long, growing out of his forehead, but blunt and brittle, and therefore of no defence to the creature.

ONE of the most extraordinary of all the birds seems to be the tulcan or preacher, which is of the size of a pigeon, but has much longer legs; its tail is short, and its plumage is of a dark colour, spotted with blue, purple, yellow, and other colours, that have a beautiful effect on the dark ground. Its head greatly exceeds all proportion, with respect to its body; but this is necessary to enable it to support its bill, which is no less than six or eight inches from the root to the point: the lower mandible closes with the upper through the whole length,

length, and both diminish insensibly to the end, when it suddenly bends and terminates in a strong, sharp point. The tongue is formed like a feather, and, as well as the inside of it's mouth, is of a deep red. The bill is variegated with all the bright colours that adorn the plumage of other birds: at the base, and also at the convexity, it is generally of a light yellow, forming a kind of ribbon, half an inch broad; and the rest is of a fine deep purple, except two streaks near the root, of a rich scarlet. The name of preacher, has been given to this bird, from it's being accustomed to perch on the top of a tree, above the other birds, his companions, while they are asleep, and making a noise, like ill-articulated sounds, moving his head to the right and left, in order to keep off the birds of prey from seizing the others. They are easily rendered so tame, as to run about the house, and come when called. Their usual food is fruit; but the tame eat other things, and, in general, whatever is given them.

ANOTHER bird of Brasil is called the cocoi, which is shaped much like our storks, and has a most curious variety of colours on it's feathers.—The guara, which the Europeans call the sea-curlew, is surprising for it's often changing it's colour, being first black, then ash coloured, next white, afterwards scarlet, and lastly crimson, which grows deeper and richer the longer the bird lives.

PARROTS, parroquets, and various birds of the same species, are there as common as we have pigeons; and though some of them are most beautifully feathered, they are in too great plenty to be esteemed by the natives, except now and then to use their feathers as ornaments.—Of the eatable fowls they have turkeys very large and delicious; and the same may be said of their other kinds of poultry,

especially a white sort of hens, whose feathers they dye of a fine green, and mix with those of other birds, which they wear about their heads and middle. They have likewise plenty of ducks and such-like water-fowl, but it is said the Brasilians will not eat them, thinking them infectious: neither will they eat any kind of eggs, esteeming them unwholesome, if not poisonous; and are surprised to see the Europeans so fond of them, and eat them without injury.

THE bats of Brasil (like those of the East-Indies) are reported to be of a prodigious size, and so bold and dangerous, that they will get into houses in the night, and suck the blood of persons whom they find asleep.

NEW CASTILE, and particularly Carthagena, is infested with such an infinite number of bats, that, after sun-set, when they begin to fly, they may, without the least exaggeration, be said to cover the streets like clouds. We have already said, that those of Brasil suck human blood; and Don Antonio de Ulloa says, that those of Carthagena are most dextrous bleeders, both of men and cattle: for, the inhabitants leaving the windows of their chambers open, on account of the excessive heats, the bats get in; and, if they find a person asleep, with the foot naked, they open a vein with all the art of a most expert surgeon, sucking the blood till they are satiated; after which it flows out of the orifice, to the great danger of the person's life. The reason why the puncture is not felt, he adds, is attributed to the gentle and refreshing agitation of the air, by the bat's wings, throwing the person into a deeper sleep, and thus preventing his feeling the slight puncture. This likewise happens to horses, asses, and mules; but beasts of a thicker skin are less exposed to it.

The

The truth of this account is confirmed by M. Condamine, who says, that there are some of a monstrous size, and that they have intirely destroyed, at Borja and other places, all the black cattle, which the missionaries had introduced there.

WE think the several species of sheep to be met with in Peru are worthy the notice of the curious, particularly those called lamas by the natives. Their heads are small in proportion to their bodies, somewhat resembling both that of a horse and a sheep, but the upper lip is cleft in the middle, like that of a hare, through which they can spit from them to the distance of ten paces ; and this spittle, it is said, if it falls on any one's flesh, makes a reddish spot, which is followed by an intolerable itching. Their necks are long, bowing downwards like the camel's ; which animal, except the bunch on the back, they pretty much resemble. Their height is from four feet to four and a half, and they generally carry a hundred weight, walking with their heads erect, looking grave and majestic, and with such a regular pace that it is scarce to be altered by beating. These sheep eat but little, and seldom or never drink, so that they are very easily kept, grazing upon a short herb like a rush, with which the mountains of that country are covered. It seems they are used by the Spaniards in the mines to carry ore to the mills ; and, when they are once acquainted with their stage, they want no guide or driver. Above the foot they have a spur, which they make use of to hold by among the rocks, so that they are wonderfully sure-footed. Their wool has a strong scent, and somewhat disagreeable ; it is long, white, grey, and fine.

THE vicunnas of Peru are shaped much like the lamas, only they are smaller and nimbler,

and their wool, being extraordinary fine, is very much valued. These creatures are sometimes hunted in the following manner: many Indians get together to drive them into some narrow pass, where they have made ropes fast across, three or four feet from the ground, on which are hung bits of wool and cloth. At the motion of these the animals are so frightened, that they dare not go any farther; so that they crowd together, and the hunters kill them with stones made fast to the end of leather thongs. If any of those creatures called guanacos happen to be amongst them, they leap over the cords, and the vicunnas follow them. The guanacos are larger and more corpulent, and in some parts are called vicachas.

OF the animals found on the coasts of America, particularly Brasil, Terra Firma, and many of the neighbouring islands, we know of none more deserving the attention of the curious than the turtle or tortoise. But it is observed there are two kinds of tortoises, the land and the sea tortoise; and this latter again is of four kinds, that is, the trunk turtle, the loggerhead, the hawksbill, and the green turtle; but it is only one sort, called the hawksbill, which furnishes that beautiful shell* so much admired in Europe. Its shell is thick, and consists of two parts, the one covering the back, the other the belly, and the two are joined together at the sides by strong ligaments, which yet allow of a little motion. In the fore part is an aperture for the head and four legs, and be-

* Mr. Catesby observes, that the hard strong covering which incloses all sorts of tortoises is very improperly called a shell, being of a perfect bony contexture, but covered on the outside with scales, or rather plates, of a horny substance, which the workmen call tortoise-shell.

hind for the hind legs and tail. We are told that the under shell alone is used, which they separate from the upper by making a little fire underneath, and as soon as it is warm it is easily taken off in laminæ or leaves with the point of a knife, without killing the animal, which (it is said) being turned to sea again acquires a new shell. These leaves are thirteen in number, eight of them flat, and five a little bent; and four of the flat ones are sometimes a foot long, and six or seven inches broad. The best tortoise-shell is thick, clear, transparent, and sprinkled with brown and white; but, when used in marquetry, and such-like works, the workmen give it what colour they please by laying coloured leaves underneath it. It may be fashioned in what manner the workman pleases, by softening it in warm water, and then putting it into a mold; for then, by the assistance of a strong iron press, it will take any impression, and may afterwards be adorned and embellished at pleasure.

OF the four kinds of turtle, only one of them is proper for food; this is the green turtle, which is generally esteemed, by the greatest part of those who are acquainted with its taste, to be the most delicious of all eatables; and, at the same time, nothing can be more wholesome; for the people of the Centurion fed on this last species near four months; and consequently, had it been in any degree noxious, its ill effects could not have escaped observation. The females go on shore to lay their eggs, which they generally deposit in a large hole in the sand, just above the high-water mark, covering them up, and leaving them to be hatched by the heat of the sun. Mr. Smith informs us, that he has seen, upon opening one of them, at least two hundred eggs, exactly round, taken out of it, about forty of which were inclosed in whitish tough

tough skins, with a substance like jelly round the yolk, and were ready to be laid all at one time; and Mr. Rogers observes, that he saw, at some islands in the South-Sea, a turtle that had at least eight hundred eggs in it's belly, a hundred and fifty of which were skinned, and ready for laying. In about twenty-five days after laying, the eggs are hatched by the heat of the sun; and then the little turtles, being as big as young quails, run directly to the sea, without any guide to lead them or shew them the way. When any of these small ones are caught before they get into the sea, they are generally fried whole, and are said to be delicious eating.

THOSE who watch on shore for the turtles, turn them on their backs, which is not performed without some difficulty, for they are very heavy, and struggle hard. After this, if they are not far enough on shore, they haul them above high-water mark, and leave them till it suits their convenience to take them away; for, when once they are on their backs, they are not able to stir from the place. The writer of commodore Anson's voyage, under the name of Mr. Walter, says, that, in the heat of day, they often saw great numbers of them fast asleep, floating on the surface of the water; when they usually sent out their boat, with a man in the bow, who was a dextrous diver; and as the boat came within a few yards of the turtle, the diver plunged into the water, taking care to rise close upon it; when, seizing the shell, near the tail, and pressing down the hinder parts, the turtle was thereby awakened, and began to strike with it's feet; which motion supported both it and the diver, till the boat came up, and took them in.

NEAR

NEAR several of the American islands, are a kind of green meadows, at the bottom of the sea, where it is not many fathoms deep; and there, when the weather is fine, and the water smooth, they may be seen creeping upon this green carpet. When they have fed sufficiently, they take their progress into the mouths of fresh water rivers. A turtle of an ordinary size, and of the best sort, will yield, at least, two hundred pounds of flesh; and their eggs, which are of the size of a hen's egg, but as round as a ball, will keep for a considerable time.

THE turtles being amphibious, they feed on grass and weeds, as well in the water as on the land; but they usually make their residence and find their aliment in the above mentioned meadows at the bottom of the sea. After they have fed sufficiently, they take their progress into the outlets of rivers for fresh water or air, and then return to their former station. In the intermission of their feeding they frequently float with their heads above the surface of the water, unless they are alarmed by any appearance of danger, in which case they suddenly plunge to the bottom; for, the tortoise having the benefit of lungs, she can distend herself by an influx of air, and be brought to an equilibrium with the water, like a frog; and, like other amphibious creatures, she is enabled to swim by the impulse and retraction of her paws, though for the generality she contents herself with creeping.

SHELLS in general make a very curious part of natural history, on account of their great variety, the uncouth make of some, and the beautiful colours and pretty ornaments of others; but, as Dr. Derham observes, it would be endless to descend to particulars, and therefore he only mentions

tions that of the tortoise. But, besides the beauty of this covering, it is an instance of the excellent provision the wise Creator has made for the good of the animal world, being a stout guard to it's body, and affording a safe retreat for it's head, legs, and tail, which it withdraws within the shell upon any danger. And it is worth remarking, that the shell supplies the place of all bones in the creature, except those of the extreme parts, the head and neck, and the four legs and tail : so that at first it is somewhat surprising to see a complete skeleton consisting of so small a number of bones, and yet those abundantly sufficient for the use of the animal.

THERE remains another remarkable thing to be mentioned concerning these creatures, which is, that for two or three months in the year they leave their common haunts, where they chiefly feed, and resort to other places to lay their eggs ; and it is thought they eat nothing during that season, so that both males and females grow very lean. This however is certain, that the land-tortoise, who is formed much in the same manner as those of the sea, is able to subsist several months without food ; for those which are kept in gardens out of curiosity in England are observed to bury themselves in the ground at the approach of winter, and there remain in a kind of sleepy state till the return of the spring invites them to leave their subterraneous retirement ; for which, according to Dr. Derham, they are admirably adapted by the structure of their heart and lungs*.

AFTER

* To the long abstinence of brute animals our author adds one or two instances of, extraordinary abstinence among mankind ;

AFTER the tortoise it is natural enough to mention the armadillo, an animal found in the West-Indies, and in Guinea, which has it's back covered with a hard shell, that seems to be buckled to it like a coat of armour. It's tail is long like a rat's, and is also covered with a scaly shell. The whole creature

kind; and first that of Martha Taylor, born in Derbyshire, who by a blow on the back fell into such a prostration of appetite, that she took little sustenance but some drops with a feather for thirteen months, and slept very little too all the time. The Dr. then mentions the case of S. Chilton of Tinsbury near Bath, who often slept for several weeks together; which case being very extraordinary, we hope an extract of it from the Philosophical Transactions will not be unacceptable to the reader. This Chilton was a labouring man, about twenty-five years of age, not fat but fleshy, and on the 13th of May 1694, without any visible cause, fell into a profound sleep, out of which he could by no means be roused by those about him, but after a month's time he rose of himself, put on his cloaths, and went about his business of husbandry as usual. From this time till about the 9th of April 1696, he remained free from any extraordinary drowsiness, but then fell into his sleeping fit again. After some days his friends were prevailed on to try what remedies might effect; and accordingly one Mr. Gibbs, an apothecary, bled, blistered, cupped, and scarified him, and used all the external irritating medicines he could think of, but all to no purpose. Victuals stood by him (as before) which he eat now and then, but no-body ever saw him eat or evacuate, though he did both as he had occasion; and sometimes they found him fast asleep with the pot in his hand in bed, and sometimes with his mouth full of meat. In this manner he lay till the 7th of August, which was seventeen weeks from the time when he began to sleep; and then he awaked, put on his cloaths, and walked about the room, not knowing he had slept so long, till, going into the fields, he found people busy in getting in their harvest, and he remembered that, when he fell asleep, they were sowing their oats and barley. From this time he remained well till the 17th of August 1697, when he complained of a shivering and a coldness in his back; vomited once or twice, and the same day fell fast asleep again. Dr. Oliver (from whom this account is taken)

creature is not much bigger than a little pig, which it resembles in it's snout, ears, legs, and feet. It has four toes before, and five behind.

AMONG the fishes to be met with in the seas of South America, particularly on the coast of Brasil, is a remarkable one called the globe-fish,

taken) went to see him, and felt his pulse, which was then very regular; he was in a breathing sweat, and had an agreeable warmth all over his body. The doctor then put his mouth to his ear, and called him as loud as he could several times by his name, pulled him by the shoulders, pinched his nose, stopped his mouth and nose together, but to no purpose, the man not giving the least sign of his being sensible. Upon this the doctor held a phial with spirit of sal armoniac under one of his nostrils, and injected about half an ounce of it up the same nostril, but it only made his nose run, and his eye-lids shiver and tremble a little. Finding no success this way, the doctor crammed that nostril with powder of white hellebore, and waited some time to see what effect it would produce; but the man did not discover the least uneasiness. The doctor then left him, fully satisfied that he was really asleep, and no sullen counterfeit, as some people supposed. About ten days after, an apothecary took fourteen ounces of blood from his arm, tied it again, and left him as he found him, without his making the least motion all the while. The latter end of September Dr. Oliver saw him again, and a gentleman ran a large pin into his arm to the very bone, but he gave no signs of being sensible what was done to him. In this manner he lay till the 19th of November, when his mother, hearing him make a noise, ran immediately up to him, and found him eating. She asked him, how he did? Very well, he said, thank God: And again she asked him, which he liked best, bread and butter, or bread and cheese? He answered, bread and cheese: whereupon the woman overjoyed ran down to acquaint his brother with it, and, both coming up again presently, they found him as fast asleep as ever. Thus he continued till the end of January or beginning of February, at which time he awaked perfectly well, remembering nothing that had happened all the while. It was observed, that he was very little altered in his flesh, only he complained the cold pinched him more than usual, and so went about his business as at other times.

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from it's orbicular form; or the sea hedge-hog, as being beset all round with large spikes like those of the land one, whereby it bids defiance to all fishes of prey, and has a surprising facility of moving itself forward on the water by the contraction and motion of those prickles.

BUT, of all the animals in these seas, there seems to be none more curious than the sea-bladder, which has not been taken notice of by many authors. It is not unfitly stiled a bladder, being in most respects like one, and swimming on the surface of the waves. It is of an oblong roundish form, five or six inches in diameter, has a skin very thin and transparent, and, like a bubble raised on the water, reflects all the colours of the sky. The inside is only filled with air, except about a spoonful of water which serves to balance it; and underneath it has a set of fibres of a vermicular form, which the creature extends or contracts, and thereby moves itself along. On it's back it has a kind of plaited membrane, which it likewise expands or folds up at pleasure, in order to take in more or less wind; and it is only by these two last circumstances that they are known to move spontaneously, except when the wind is too strong for them to resist, by which they are frequently driven on shore and taken.

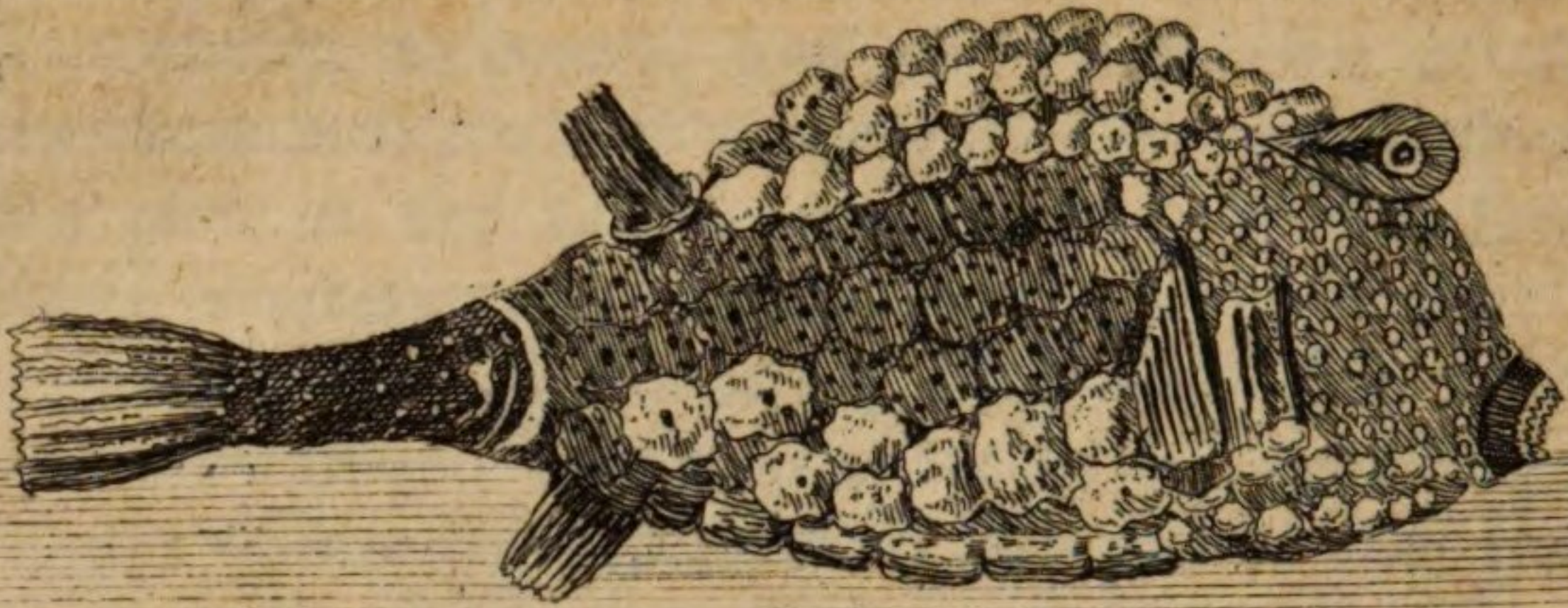
IN the seas we are speaking of (as well as in some others) is to be found the little fish called the remora, or sucking-fish, resembling a herring, with crest and fins, having a sucker about two inches long on the top of his head. The mouth is wide, the eyes small, the under jaw longer than the upper, with two rows of small sharp teeth. This fish was much talked of amongst the ancients, who supposed (as appears from Pliny) that, by sticking to the side of a ship, it was able to stop the vessel under full sail,

fail, or a whale in swimming *. But, as Mr. Catesby observes, a number of these fishes can do no more than shells, or corals, and other foulnesses of the the same bulk, which make a ship somewhat slower; and in the same manner they may be some small hindrance to a whale.

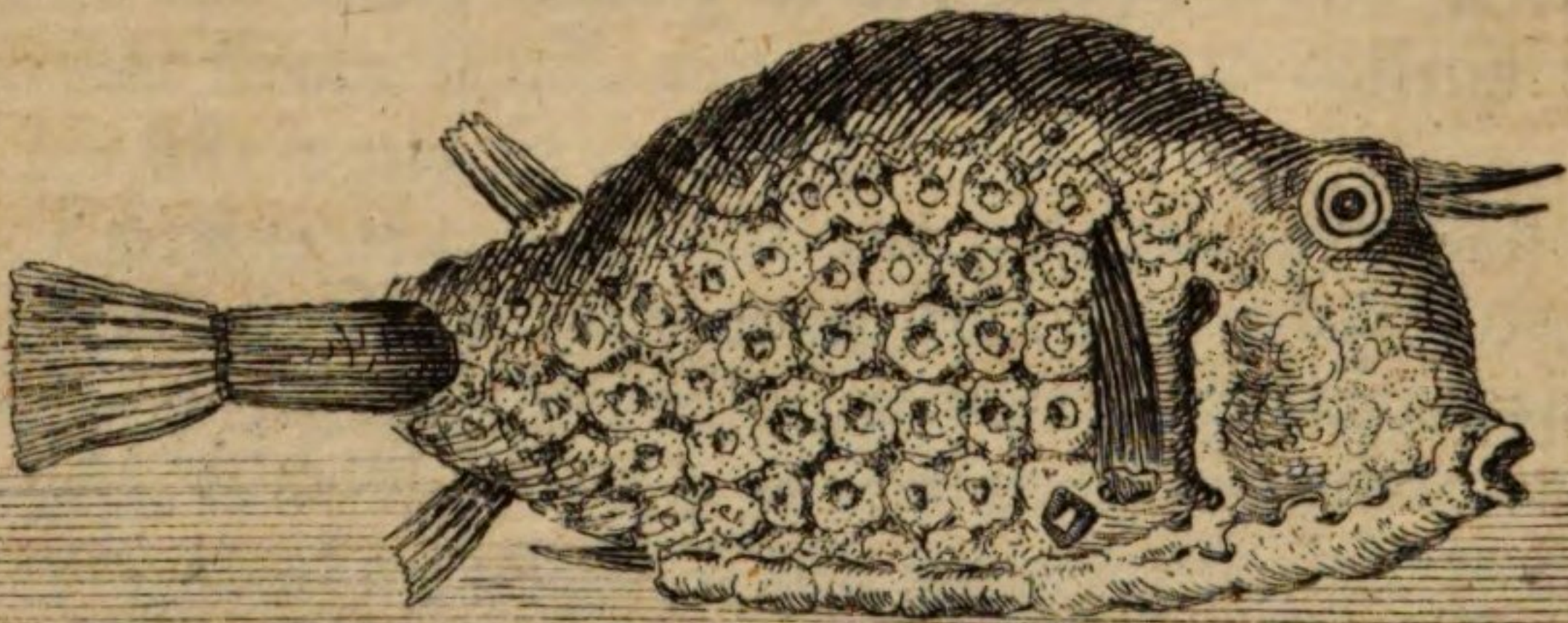
MR. GROSE informs us, that these fish fasten upon the shark, by means of an oval-shaped membrane, of a texture admirably adapted to that purpose, with which they stick so close to the skin of the shark, commonly on it's sides or back, as not to part with it, even when it is taken; and it is difficult to separate them by the utmost strength of the hands, if pulled against the grain of the sucker; but, sliding them on forward with the grain, they come off easily enough; and this force of adhesion continues while there is any life in them, as may be proved on applying them to a table, or any hard substance. It doubtless annoys the shark in the nature of vermin, drawing it's sustenance from the slimy oozing of it's body, while it can neither shake it off, nor come at it to destroy it. This fish is not fit for food.

To this we may add the pilot-fish, which is seldom above a foot or a foot and a half long, but is extremely beautiful, it being streaked transversely, with blue and a yellowish brown, that have a very pleasing effect in the water, but lose much of their lively gloss when taken out of it. These fish, says Mr. Grose, are ofteneft seen in small shoals, swimming immediately a-head of the shark, or near him. When a bait is thrown out for the shark, they cluster about it, without attempt-

* Hence they give it the name of remora, from remoror, to stop or hinder.



Old Wife fish.



Old Husband fish.

ing to nibble it; but, by their motions to and fro, seem to guide the shark towards it; from whence they obtain the name of pilot-fish; when in company with the shark, they seldom take the small hook; but, when they have lost this their consort, or follow a ship, either singly, or in shoals, they sometimes bite and are caught. They are esteemed, for their size, the most delicious eating the ocean affords, and have nothing of that dryness attributed to the other fish of the ocean.

IN the seas of South America, and especially about the tropics, are often seen swimming in shoals those fishes we call old wives* and old husbands, which indeed make a very remarkable figure. The former is commonly about ten inches long, and five in breadth; has a very small mouth, with sharp teeth, a large eye placed high on it's head, two nostrils or vent-holes under the fore part of the eye, a rising sharp back, the belly flattish, and the whole fish is covered with a hard crustaceous skin, of a brown colour, but curiously marked with indented spots, which are large on the sides, and smaller about the head and tail. The tail is long and slender, and the fish can draw it into it's body at pleasure, as it were into a socket. It has four fins of a lighter brown than the body, as is also the end of the tail.

THE old husband, supposed to be the male species, seems designed by nature for the defence of the female, as well as his own, being armed with two sharp horns on the fore part of his head, growing from a thick basis, about three quarters of an inch in length; and, though but slender,

* Pascoe Thomas says they found plenty of these fish (amongst others that he mentions) at the island of St. Catharine's on the coast of Brasil.

they are so strong, that he is capable of giving dangerous wounds to the sides of an enemy. His hinder part is likewise well guarded with two long fins like his horns, one on each side of the belly near the tail ; and, when closely chased, he draws up his tail, and bids defiance with his horns to his pursuers. These two fishes swim together in company, and, except the horns, they pretty much resemble each other.

BUT to return to the land, where we shall find some remarkable animals not yet mentioned ; and first it may not be improper to take notice of what some travellers relate concerning the various kinds of monkeys to be met with in the Andes and other parts of South America. Some of them are said to be merry, others melancholy ; some nimble, and others heavy ; some hairy, others almost naked ; of themselves timorous, but taking courage if a man seems to be afraid.

ALMOST all the woods and forests of South America are filled with different kinds of them, of various colours as black, brown, and inclining to red ; there is also the same diversity in their size, some being a yard long, others half a yard, and others scarce a foot. The different species of these animals, skipping in troops from tree to tree, hanging from the branches, and playing a thousand gambols, and, in other places, six, eight or more of them, linked together, in order to pass a river, with the dams, carrying their young on their shoulders, or throwing themselves into the oddest gestures, must appear fictitious to those who have not actually seen them. The flesh of all these different kinds is highly valued by the Negroes, especially that of the red ; but, however delicate the meat may be, says our author, the sight of them, is enough to make the stomach abhor

abhor them; for, being scalded when dead, in order to take off the hair, the skin is contracted by the heat, and, when thoroughly cleaned, looks perfectly white, and nearly resembles a child of about two or three years of age, when crying: yet the scarcity of food, in many parts of America, renders their flesh valuable; and not only the Negroes, but the Creoles, and even the Europeans themselves, eat them without scruple. It is highly probable, that most of those people who have been stigmatised by the first discoverers with the name of Cannibals, obtained it on account of their eating these animals, which when thus dressed, were mistaken for children, and the larger kind for men and women. Indeed, there can be no doubt of this being the case, since most of the nations, who have been charged with living upon human flesh, have been found, upon a better acquaintance with them, to be of a mild and benevolent disposition, ready to grant their aid to all who wanted their assistance; unless it be supposed that the first discoverers, merely from a spirit of malevolence, represented them in such odious colours, in order to give a sanction to their cruelties, and to have a plausible pretence for plundering and murdering those who had never injured them.

ALLIGATORS are very common, both in South America, the West-Indies, and indeed in great part of North America; but they seem to abound no-where in greater numbers, than on the river Guayaquil, in Peru. These amphibious animals, that live both in the rivers and adjacent plains, when tired with fishing, leave the water, to bask themselves in the sun, and then appear rather like rotten wood, thrown ashore by the current, than living creatures; but, upon perceiving any vessel near them, they immediately throw themselves into
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the water. They are the largest animals of the lizard kind, some of them being here of so monstrous a size as to exceed fifteen feet in length. Of this animal we have given some account in treating of the crocodile of Egypt; and several writers believe the two animals are of the same species, while others maintain that there is a considerable difference between them. The head of the alligator is long, turning up at the nose, like the snout of a hog, and furnished with two rows of strong pointed teeth. His eyes are large, round, clear, and grey, with a black pupil. The fore legs are shorter and weaker than those behind, and have five toes, three of which are armed with nails, but the two others are without. The hinder feet are larger and thicker, and have only four toes. Over the eyes are two hard, scaly knobs, as big as a man's fist; and, from the head to the tail, are a multitude of hard knotty scales. These scales, with which the whole body is covered, are impenetrable to a musket-ball, unless it happens to hit him in the belly. The flesh smells very strong of musk, especially four cuds or kernels, two placed in the groin, near the thigh, and the other two at the breast, one under each fore leg, about the size of a pullet's egg. During the time they lie basking on the shore, their huge mouths are wide open, till filled with musketoes, flies, and other insects; when, suddenly shutting their jaws, they swallow their prey. They generally avoid a man, and, on the approach of any one, plunge into the water. The female makes a large hole in the sand, near the brink of a river, and in it deposits her eggs, which are almost as large as those of an ostrich, and as white as those of a hen, but much more solid. She generally lays about a hundred, continuing in the same place till they are all deposited, which is about a day or two. She

She not only covers them with sand; but, the better to conceal them, rolls herself over them, even to a considerable distance, and then returns to the water, till natural instinct informs her that it is time to deliver her young from their confinement. When she comes to the spot, she is followed by the male; she then tears up the sand, and begins breaking the eggs, with such care, that scarce a single one is injured, and a whole swarm of little alligators are seen crawling about. She then takes them on her neck and back, to remove them into the water; but the watchful gallinazos seize this opportunity to deprive her of some; and even the male alligator, which indeed comes for no other purpose, devours what he can, till the female has reached the water with the few remaining; and then all that fall from her back, and do not swim, she herself eats; whence, of this formidable brood, happily no more than four or five escape. The gallinazos, of which we have just given a description, contribute greatly to prevent their increase; for being extremely fond of their eggs, they, upon this occasion, make use of extraordinary address, and often make it their sole business to watch the females during the dry season, when they lay their eggs, the sides of the river not being then covered with water. The gallinazo keeps itself concealed among the branches of some tree, till the alligator has laid her eggs and is retired; but she is no sooner under the water, than the gallinazo darts down on the repository, and, with its beak, claws, and wings, tears up the sand, and devours the eggs, leaving only the shells. This banquet would richly reward its long patience, did not a multitude of gallinazos, from all parts, join the fortunate discoverer, and take a share in the spoil. These eggs, when fresh, are also eat by the mu-

lattoes. Thus Providence graciously diminishes the number of these destructive animals, which would soon increase so fast, that neither the river, nor the neighbouring fields, would be able to contain them.

THESE destructive animals use great address in catching fish, which is their principal food: eight or ten, as if by agreement, drawing up at the mouth of a creek or river, while others go a considerable distance up, and chace the fish downwards; by which means none of a large size are able to escape them. The alligators, being unable to eat under water, on seizing a fish, raise their head above the surface, and, after satisfying their appetite, lay themselves on the banks. When they cannot find fish, they betake themselves to the meadows near a river, and devour colts and calves. This is done in the night, in order to surprise them in their sleep; and it is observable that those which have once tasted flesh, become so fond of it, as never to feed upon fish, but in cases of necessity. There, are, indeed, many melancholy instances of their devouring the human species, especially children, who are out of doors in the dark; and, having once seized them in their mouths, they make sure of their prey, against that assistance which the cries of the victim constantly bring, by hastening into the water, where they immediately drown it, and then, rising to the surface, devour it at leisure. The boatmen, by inconsiderately sleeping, with one of their arms or legs over the side of a boat, have been seized by these animals, and the whole body drawn into the water. Those alligators, who have once feasted on human flesh, are known to be most dangerous, and are said to entertain an insatiable desire of repeating the same repast. Hence the inhabitants of the
places

places where they abound, are very industrious in destroying them. For this purpose, they usually take a piece of hard wood, sharpened at both ends; this they fasten in the middle to a thong, the end of which is secured on the shore, and then bait the wood with the lights of some animal. The alligator, on seeing the lights floating on the water, snaps at the bait, and, both points of the wood entering his jaws, he is dragged on shore, with his mouth wide open. He then endeavours, with all his might, to rescue himself, while the Indians bait him, knowing the greatest damage he can do them, is to throw down those, who, for want of agility or care, do not keep out of his reach.

BUT the most surprising relations travellers entertain us with are concerning the multitude and monstrous size of the serpents of Brasil. We are told of some that are thirty feet long or upwards, and as big about as a hog's head, so that they can swallow at once a whole buck or a man, and easily take either of them by throwing their tails round them; and hence this frightful creature has obtained the name of the roebuck serpent. Nay, to carry the matter still farther, we are likewise told of a water snake in Brasil, near forty feet long, and every way proportionable, in whose body were found two wild boars he had swallowed.

THOUGH these accounts may be exaggerated, it is certain that Brasil is remarkable for large serpents and other venomous creatures. There is one called *ibaboka*, which is between three and four yards long, and of a considerable thickness. It's colours are various, as black, white, red, green, &c. and it's bite mortal, but the poison works the slowest of any. On the other hand they have a little four-legged animal of so venomous a nature, that it's sting is absolutely mortal, unless

the part be immediately cut off, or burnt with a red-hot iron. Some of their scorpions are four or five feet long, but their sting is not reckoned so dangerous as those in Europe. They have also lizards three or four feet in length, and in great numbers.

ONE of the most common snakes, in the government of Carthagenæ, is the coral-snake, which is generally between four and five feet in length, and an inch in diameter. It makes a very beautiful appearance, the skin being variegated with green, yellow, and a vivid crimson. The head is long and flat like a viper; and each mandible furnished with a row of pointed teeth; through which, during the bite, they insinuate the poison, which is most dreadfully malignant; the person bit swelling to such a degree, that the blood gushes out through all the organs of sense, and even the coats of the veins, at the extremities of the fingers, burst.

THE willow-snake resembles, in colour and form, a stick of that tree; these are very common; and, as they frequently hang from the boughs, really seem to be a part of the tree, till a too near approach unhappily discovers the mistake. Though its poison is less active than that of the coral-snake, its bite proves mortal, unless a remedy be speedily applied.

THE centepæe or scolopendra, which received the first of these names from the great number of their feet, are not only very numerous, but of a monstrous size at Carthagenæ; and are more dangerous from their breeding in the houses: for they are generally a yard in length, and some a yard and a quarter, with about five inches in breadth. The back and sides are covered with hard scales of a brown colour, tinged with red; but so articulated

articulated as not in the least to impede their motion; and yet so strong as to defend them against any blow; so that you can only kill them by striking them on the head. They are very nimble, and their bite, without timely application, proves mortal.

AFTER mentioning these reptiles, it will be proper to take notice of an insect extremely remarkable for the venom it contains. Its common name is coyba or coya: in its shape it resembles a spider, but is much less than a bug. It is found in the government of Popayan in Terra Firma, or New Castile. Its colour is of a fiery red, and, like the spider, is usually found in the corners of walls, and among the herbage. Its venom is so extremely malignant, that on squeezing the insect, if any of it happen to fall on the skin, either of man or beast, it instantly penetrates into the flesh, and produces large tumours, that are soon succeeded by death. The only remedy hitherto known is, on the first appearance of a swelling, to singe the party all over the body, with flaming straw, or the long grass growing in those plains, where they are found. For this purpose, the Indians of that country lay hold of the patient, some by the feet, and others by the hands; and with great dexterity perform the operation; after which the person is thought to be out of danger. Though this insect is so very noxious, yet squeezing it between the palms of the hands is attended with no ill consequence, the callus preventing the venom reaching the blood; accordingly the Indian muletteers, in order to gratify the curiosity of the passengers, squeeze them between the palms of their hands; but, should a person unused to labour make that experiment, the effect would probably be nearly the same, as on any other part of the

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body. The people who travel along the vallies of Neyba, and others within the jurisdiction of Popayan, where they are in great danger from these coybas, are warned by the Indians who attend them, that, if they feel any thing stinging or crawling on their neck or face, to take care not to scratch, nor even to lift up their hand to it, the coyba being of so delicate a texture, that it would instantly burst; and as there is no danger, while they do not eject the humour they contain, the person acquaints some of the company with what he feels, and points to the place, where, if it be a coyba, the other blows it away. It is remarkable, that the beasts, who are incapable of such warning, are by instinct, taught a precaution against the danger; for, before they offer to touch the herbage with their lips, they blow on it with all their force, in order to disperse any of those pernicious vermin; and when their smell acquaints them, that they are near a nest of coybas, they immediately leap, and run to some other part; but sometimes a mule after all his blowing, has been known to take in some with his pasture; on which, after swelling to a frightful degree, it expires on the spot.

BUILDINGS.

THE reader will not expect any thing very extraordinary under this head, in a part of the world whose inhabitants have been generally supposed impolite and barbarous: but, as the incas or ingas of Peru are famous in history, it may not be amiss to give a short account of some of the noble structures which the Spaniards found when they first invaded that country. At that time Cusco was the capital of the kingdom, and there

there was a castle built in such a surprising manner that many people, who saw it, imagined it could not have been raised without the assistance of enchantment. This fortress stood on the top of a hill, and on the edge of a precipice, which towards the town was perfectly perpendicular. Towards the country it was defended by triple semicircular walls, of such height and thickness, that they were proof against all the force that could be brought against them. Some of the stones, were of such a prodigious size, that it was inconceivable how they were hewn out of the quarry, or brought to the place, the natives having no iron tools, no beast to draw them, nor engines to raise them to such a height. They were dragged, however, by the strength of men, ten, twelve, or fifteen leagues, over hills and valleys, and along the most difficult roads; and there is one stone in particular, to which the Indians give the name of Syacusa, that is the Weary, because it never arrived at the place for which it was designed. This rock was drawn fifteen leagues by twenty thousand Indians, over very rugged and uneven ways; but, notwithstanding all their care and strength, it got the better of them, and tumbling down the hill killed several hundred men, who were endeavouring to poise the weight. They raised it however once again, and with incredible pains dragged it to the plain in the neighbourhood of Cusco, where they were obliged to leave it, never being able to get it up the hill on which the castle was situated.

BETWEEN each wall of the castle there was a space of twenty-five or thirty feet, which was filled up with earth, and every wall had a breast-work on the top of it. Beyond these walls were three large towers, standing in a triangle, answerable

to the bending of the walls. The principal of these towers had a fountain of excellent water, brought to it by a subterraneous aqueduct, the source whereof was only known to the inca and his council, lest an enemy should discover the stream, and cut it off in case of a siege. This tower was round, and in it the inca had an apartment, nobly furnished like the rest of his palaces. The other two were square, and contained rooms for the garrison, who were all of the royal blood. Underneath these towers were apartments as large as those above; and they had a communication with each other by a subterraneous labyrinth through which it was difficult for a stranger to find his way without a guide. It is said that great part of the new city of Cusco was built with the stones found in the ruins of this fortress.

THE palaces of the incas in Cusco, besides the castle just mentioned, were very spacious and magnificent, some of the halls being two hundred paces in length, and fifty or sixty in breadth; insomuch that the Spaniards converted one of them into a cathedral church. The stones of these buildings were so well joined together that they needed no cement; but sometimes, for the sake of ornament they closed up the seams of their structures, with melted gold and silver, which occasioned the total destruction of most of them, the Spaniards subverting the very foundations in hopes of finding treasure. The furniture and decorations of these palaces were the figures of men, beasts, birds, and other animals, cast in gold; and on the walls, instead of tapestry, were plants and flowers of the same metal, intermixed with serpents, butterflies, and other reptiles and insects. It is said they had no chairs in their palaces, but the Inca himself sat on a stool made of

of gold, without arms or back, having a pedestal of the same metal: They had also cisterns of gold in their bagnios, and the utensils of their kitchens, and in the meanest offices, were likewise of gold; but they neither purchased houses nor lands with this metal, as we do; but used it as an ornament when living, and buried it with them when they died. The royal gardens were not only planted with great variety of trees, flowers, &c. but the figures of those and all sorts of animals were made of gold, and placed in the walks to adorn them.

HOWEVER, notwithstanding the magnificence of the palaces in Cusco, nothing was comparable to the temple of the sun, which was enriched with the greatest treasures that ever the world beheld. It was built of free-stone, and lined with gold, the cieling being also of the same metal, though the roof itself was no better than common thatch. It was divided into several chapels, cloysters, or apartments; in the principal whereof, towards the east, was placed the image of the Sun, consisting of one gold-plate that covered the whole breadth of the chapel, and twice as thick as the plates that covered the other walls. This image was of a round form, representing the Sun with his rays darting from him, much in the same manner as he is drawn by European painters; and on each side of it were placed the bodies of the deceased incas, so embalmed that they seemed to be alive. These were placed on thrones of gold, but on the arrival of the Spaniards they were concealed by the Indians, with most of the treasures of the temple.

THIS temple had several gates covered with gold; and round the top of it, on the outside, was a cornice a yard deep, consisting of gold plate. Besides the chapel of the sun, there were

five others of a pyramidical form, the first of which was dedicated to the Moon, deemed the sister and wife of the Sun ; and the doors and walls of this structure were covered with silver. Here was the image of the Moon, of a round form, with a woman's face in the middle of it ; and on each side of the image were placed the bodies of the deceased empresses ranged in order. Next to this chapel was that of Venus, by the Peruvians called Chasca, who was much esteemed as an attendant on the Sun, as the rest of the stars were deemed maids of honour to the Moon ; and this chapel was likewise plated with silver. The third chapel was dedicated to thunder and lightning, which they looked upon as servants of the Sun ; and this was cieled and wainscoted with plates of gold. The fourth was dedicated to the rainbow, as owing it's original to the sun ; and this was also covered with gold, and had on one side of it a representation of the rainbow. The fifth chapel was an apartment for the use of the high-priest, and others who officiated in the the temple, who were all of the royal blood ; and this, like the chapel of the Sun, was adorned with gold.

THERE was no other image worshipped in the temple but that of the Sun, but they had the figures of men, women, and children, and of various birds, beasts, and other animals of wrought gold, placed in it for ornament ; and all the vessels and utensils were of the same precious metal. We likewise read of a sort of nunnery wherein were kept a thousand or fifteen hundred virgins, all of the blood of the emperors, who were intended only for the service of the temple. Nor was it only in the city of Cusco that a temple was erected, but almost every large town in the country had one adorned in the like sumptuous manner.

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THUS much we thought proper to say, in order to give the reader some idea of the grandeur the Peruvian monarchy, before it was subdued and brought under the Spanish yoke.

Of the Inhabitants of SOUTH AMERICA.

WERE we fully to describe the customs and manners of all the several nations that inhabit this vast country, it would fill a volume; we shall therefore here only treat of the principal.

THE inhabitants of Lima consist of Spaniards, Indians, Negroes, Mestizos, and a variety of other casts, proceeding from the mixture of all three. The Spaniards, who make the greatest figure, have a multitude of slaves and other domestics, and keep coaches; while others are satisfied with having a chaise, no family of any substance being without one. These carriages are drawn by a mule guided by a driver, and have only two wheels, with two seats opposite to each other; they are very light and airy, and, on account of their carving and gilding, sometimes cost eight hundred or a thousand crowns. There are said to be no less than five or six thousand of these vehicles kept in the city of Lima. The Negroes, Mulattoes, and their descendants, form the principal part of the inhabitants of that city; and of these are most of the mechanics. The Europeans also follow the same employments, for, the desire of gain being here the universal passion, the inhabitants pursue it by all possible means.

THE dress of the men, in general, is little different from that worn in Spain; nor is there much distinction between the several classes, every body being allowed to wear whatever he can purchase; so that a mulatto, or any other mecha-

nic, is frequently seen dressed in rich tissue. Every body at Lima are fond of fine cloaths, and extremely lavish in this article. But the dress of the men is greatly exceeded by that of the women, who, in the choice of their laces, carry their taste to an amazing excess; and this has spread through all ranks, except the lowest class of Negroes; and no woman of rank will wear any that is not made in Flanders. The dress of the ladies consists of a pair of shoes, stockings, a shift, a dimity petticoat, and a jacket; which in summer is of linnen, and, in winter, of a beautiful stuff. From the under pettycoat, which only reaches to the calf of the leg, hangs a border of very fine lace, through which the ends of their garters are discovered, embroidered with gold or silver, and sometimes adorned with pearls. The upper petticoat, which is of velvet, or some rich stuff, is fringed all round, and all over adorned with fringe, lace, or embroidery. The shift-sleeves, which are a yard and a half in length, and two wide, when worn for ornament, are covered with lace, so as to render the whole truly elegant. Over the shift is worn the jacket, which has large circular sleeves, consisting of rows of lace, or slips of cambric, with lace disposed between each. The body of the jacket is tied on the shoulders, with ribbons fastened to the back of the stays; and it's round sleeves, being tucked up to the shoulders, form, with those of the shift, what may be termed four wings. In summer they have a kind of veil of the finest cambric or lawn, richly laced; but, in winter, the veil worn in their houses is of bays, which, when they go abroad full dressed, is adorned like the sleeves. Over the petticoat is an apron of the same stuff as the sleeves of the jacket. In short, they are so expensive in their dress, that the marriage-

marriage-shift alone, frequently costs a thousand crowns. Their shoes which have round toes, are always fastened with diamond buckles, or something very brilliant, in proportion to the ability of the wearer. Their hair, which is naturally black, and capable of reaching below the waist, they tie up behind in six braided locks, through which is inserted a gold bodkin, a little bent, with a cluster of diamonds at each end; and on this the locks are suspended, so as just to touch the shoulders. On the front and upper part of the head, they wear diamond egrets, and the hair is formed into little curls, hanging from the forehead, to the middle of the ears, with a large black patch of velvet on each temple. Their ear-rings are of brilliants, intermixed with tufts of black silk, covered with pearls; and, besides their necklaces, they wear rosaries about their necks, the beads of which are of pearls, either separate, or set in clusters. Their diamond rings, necklaces, girdles, and bracelets, are all very curious, both with regard to water and size; many ladies wear a round jewel enriched with diamonds, suspended from their girdle, and much more superb than their other ornaments. In short, a lady thus dressed is supposed to wear, at one time, what costs no less than thirty or forty thousand crowns; and yet the small value they seem to set upon them, by wearing them upon all occasions, is really surprising.

THE women of Lima are generally of a middling stature, handsome, genteel, with a remarkable lustre in their eyes; and the charms of their persons are said to be heightened by those of the mind, they having clear and comprehensive intellects, with an easy and graceful behaviour that commands both love and respect; but are so fond

fond of perfumes that they constantly carry ambergris about them; and, not content with the natural fragrance of flowers, of which they are likewise extremely fond, scatter perfumes even on their nosegays. The most beautiful flowers they place in their hair, and those most esteemed, for their fragrance, they stick in their sleeves. Hence the effluvia issuing from these ladies reach to a considerable distance. The lower class of women, even to the very Negroes, endeavour as much as possible, to imitate their superiors, in the fashion and richness of their dress; and their cleanliness is seen in the extraordinary neatness of their houses. They are naturally gay, sprightly and jocular, without levity, remarkably fond of music, and, having, in general, good voices, the lowest among them, entertain you with agreeable songs.

THE nobility are extremely courteous to strangers, who are charmed with their probity, their politeness, candour, and magnificence. The natives of an inferior rank are said to have too great a share of pride, but are so grateful, that a few instances of kindness, make a lasting impression on their minds: however, the Mulattoes, being less civilized, are haughty, quarrelsome, and turbulent.

THE viceroy of Lima usually resides in that city; his government is triennial; he has all the prerogatives of royalty, he being absolute in all affairs, whether military, civil, criminal, or relating to the revenue. Under him are officers and tribunals, for executing the several departments of government; and he fills up all the vacant posts. For the security of his person, he has a body of a hundred and sixty horse-guards, under the command of a captain and lieutenant, all in a blue uniform, richly laced with silver: a body of
fifty

fifty halberdeers stationed in the rooms leading to the royal audience-chamber, whose waistcoats are of crimson velvet, with a broad gold lace: he has likewise, within his palace, another guard, consisting of a detachment from the garrison at Callao. All these are occasionally employed in executing his orders, and enforcing the decrees of the tribunals, after their having received his assent.

THOUGH the plague and many other diseases, that produce the most fatal effects in Europe, are here unknown, yet they have others that are no less fatal and painful. The most common at Lima are malignant, intermitting, and catarrhus fevers, constipations, pleurifies, and convulsions. These last are extremely dreadful, and are divided into two kinds, the common or partial, and the malignant. They both come when nature is struggling in the crisis of some acute disease; but those afflicted with the former often recover, though the greater part die on the third or fourth day; while those who have the misfortune of being attacked by the latter, sink under it in two or three days. Both are attended with insupportable anguish; so that the groaning patient cannot be moved even from one side to the other, without inconceivable tortures. The throat is so contracted that nothing can be conveyed into the stomach; and the jaws are sometimes so closely shut, that it is impossible to open them. Thus the miserable patient lies motionless, and tortured in every part of his body. The malignant kind is even in the first stage so violent, as to cause a contraction of the nerves of the vertebræ from the brain downwards; which, with all the muscles, become more and more constricted all over the body, till it is drawn backward in the form of an arch, and all the joints dislocated. The women of Lima are subject to a cancer

cancer in the matrix, which is extremely painful, very contagious, and almost incurable. Slow and hectic fevers also prevail here; and the venereal disease is so common in this and all the other parts of Spanish America, that it is considered as no dishonour, few being intirely free from it.

SOME singularities are to be observed among the Spaniards in the different cities in South America; but they are generally, in most respects, like those of Lima; we shall therefore, instead of continuing a subject, that would soon grow tiresome, lead our readers attention to the manners and customs of the Indians in the audience of Quito. These people, at present, seem to have no resemblance to those first found in the country; and, at present, possess a tranquillity, which no accident can disturb. In their mean apparel, they are as satisfied as a prince in the most splendid robes: they disregard riches, and even the authority and power within their reach; so that, to all appearance, it seems to be the same to an Indian, whether he be created an alcalde, or obliged to perform the office of an executioner; for their regard for each other is neither increased nor diminished by such circumstances; and they are as well satisfied with their simple diet, as others with the most luxurious repasts. Fear cannot stimulate, respect induce, or punishment compel them, to shake off their natural indolence; and, as scarcely any thing can prevail on them to work, whatever is necessary to be done is left to the Indian women, who, being much more active, spin and make the half shirts and drawers, which form the only apparel of their husbands; they likewise cook the provisions, grind barley, and brew a kind of beer, called chicha; while the husband sits squatting on his hams, looking at his busy wife.

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The only domestic service they perform is to plow their little spot of land, which is sowed by the wife. When they have once squatted down, no reward can induce them to stir; so that, should a traveller, who had lost his way, come to one of their cottages, the wife must say that he is not at home. If he should alight and enter the cottage, the Indian would still be safe; for, having no light but what comes from a hole through the door, he could not be discovered; and, should he even see the Indian, neither intreaties, nor rewards, would induce him to stir a step. They are lively only in parties of pleasure, rejoicings, entertainments, and especially dancing; but the liquor must circulate briskly, and they continue drinking, till they are intirely deprived of sense and motion. Yet it is remarkable that the Indian women and the young men, before they are of an age to contract matrimony, are never guilty of this vice, it being a maxim with them, that drunkenness is the privilege of none but masters of families, who have others to take care of them when they can take no care of themselves.

ON the celebration of any solemnity, he who gives the entertainment, invites all his acquaintance, providing a jug of chicha for each, containing two gallons. If it be a large town, a table is placed in the court of the house; or, if it be in a village, before the cottage; this is covered with a carpet only used on such occasions, and upon it is placed a slight repast. The women present the chicha to their husbands in calabashes, till their spirits are raised, and then one plays upon his pipe and tabor, while others dance. Some of the best voices among the Indian women sing songs in their own language, those who do not dance squat down till it comes to their turn, and,

and, when tired with intemperance and dancing, they all lie down together. These festivities sometimes continue three or four days, till the priest, coming among them, spills all the chicha, and disperses the Indians, lest they should get more.

IN their cottages, both they and the animals they breed live together. As they are fond of dogs, they are never without three or four, a hog or two, and a few poultry. These, with some earthen-ware, as pots and jugs, with the cotton which their wives spin, are all their effects, except two or three sheep-skins, which serve them for beds. Though the Indian women breed fowl and other domestic animals in their cottages, they will neither eat nor sell them : so that, if a traveller, who is obliged to pass the night in one of their cottages, offers ever so much money for a fowl, they refuse to part with it, and he is obliged to kill the fowl himself, at which the good woman shrieks and bursts into tears, till, seeing no remedy for what is past, she wipes her eyes, and quietly takes what the traveller offers her.

As in their journeys they frequently take their whole family with them, they fasten the door, with a string or thong of leather, which serves for a lock ; and, if their journey is to last several days, they take their animals to the cottage of some neighbour or acquaintance ; if otherwise, they leave their dogs to guard them ; and these discharge their trust with such fidelity, that they will fly at any one, except their masters, who offers to enter the cottage. It is observed, that dogs, bred by the Spaniards and Mestizos, have such a hatred to the Indians, that, if one of them approaches a house where he is not very well known, they fall upon him, and, if not called off, tear him to pieces ; for they know them at a distance

tance by their scent. On the other hand, the dogs of the Indian breed are animated with the same rage against the Spaniards and Mestizos, whom they also smell at a distance.

THE Indians of this country act contrary to all other nations in their marriages; for they never chuse a woman who has not been first known by some body else, which they consider as a certain sign of her having something pleasing in her. A young man having asked the object of his affections, of her father, and obtained his consent, they immediately begin to live together as man and wife. But, at the end of three or four months, and frequently of a year, he leaves her without any ceremony, and perhaps expostulates with his father-in-law, for imposing upon him, by giving him his daughter, whom no body else had thought worthy of making his bedfellow. But, if nothing of this happens, after passing three or four months in this commerce, they then marry. This custom is still very common, though the whole body of the clergy have used their utmost endeavours to put a stop to it; and accordingly they always absolve them of that sin, before they give him the nuptial benediction.

THESE Indians shew their intrepidity upon many occasions, especially in the alacrity and resolution with which they halter a bull or bear at full speed; for a single Indian, with only a horse and his noose, never fails of getting the better of all the cunning and rage of the most furious bear. This noose is made of a cow-hide, so thin as not to be seized by the beast's paw, and strong enough not to be broken by his struggling. On perceiving this animal, they directly make towards him, while he rears himself up, in order to seize the horse. But the Indian, being advanced within a proper distance, throws the noose about the bear's neck, and,

and, fastening the other end to the saddle, instantly claps spurs to his horse ; and the bear, unable to run so fast as he gallops, and struggling to get free, is choaked. In short, great part of the rusticity of the Indians is owing to the want of education ; for, where they have enjoyed that advantage, they are found to have as good rational faculties as other men. Hence all the Indians, brought up to handicraft trades in cities and large towns, appear far more acute and sensible than those who have past their lives in little villages ; and many of these distinguish themselves by their genius and abilities.

AMONG the singular manners and customs of the several nations of South America, we ought not to omit the extraordinary government of the Jesuits in Paraguay, who have above three hundred and forty thousand families subject to them, and living in an obedience and awe, bordering upon adoration ; yet procured without any violence or constraint, and cemented by their having engaged to protect them against the insolence of the Spanish soldiers, the tyranny of the governors, and the inhuman inroads of the Portuguese. The Paraguay missions are terminated on all sides by nations of idolaters, and consist of about sixty parishes, on the banks of the rivers Paraguay and Panama, at about thirty miles distance from each other. In each of these parishes is a Jesuit, who is supreme in all causes, civil, military, and ecclesiastic, and may be considered as a petty prince, who, has the authority of a sovereign, and the influence of an oracle. Yet the important office of governor is always filled up by a person chosen by the Indians, with the priest's approbation. The alcaldes are annually appointed by the regidores, and the governor, in conjunction with them, attends

tends to the maintainance of good order; but, as these officers, who are Indians, may, either through interest or passion, carry their resentment too far against the other Indians, they are not to proceed to punishment without acquainting the priest, who, on finding the person really guilty, delivers him up to be punished, which generally consists in imprisonment for a certain number of days; fasting is sometimes added to it, but, if the fault be very great, the delinquent is whipped, which is said to be the severest punishment used among them. Before the execution of the sentence, the priest represents, in the most mild and pathetic terms, the nature and guilt of the crime; by which means the delinquent is frequently brought to acknowledge the justice of the sentence, and to receive it rather as a paternal correction, than a rigorous punishment.

IN every town is an armory, in which are kept the fire arms, swords, and weapons, belonging to the militia, and which they use when they take the field, either to repel the insults of the Portuguese, or of the free Indians, on their frontiers; and that they may learn the use of them, they are exercised on the evening of every holiday, in the market-place of the towns. All capable of bearing arms, are, in every town, divided into companies under their proper officers, who owe their advancement to their military qualifications. Their uniform is laced with gold or silver, according to their rank, and embroidered with the device of their town; and in these they always appear on holidays, at the times of exercise.

THE houses of the Indians are built with such symmetry and convenience, and so well furnished, as to excel those of the Spaniards, in that part of America. However, most of them, have only mud walls, but some are of unburnt brick, and others

others of stone; but they are generally covered with tiles. Gunpowder is said to be made in all private houses, that there may be no want of it, either for war, or for fire-works on holidays. In each of the towns is a house, in which women of ill fame are placed, and for the retreat of married women, who have no families, during the absence of their husbands. For the support of this house, and also of the orphans and those who, by age or any other circumstance, are disabled from earning their living, two days in the week are set apart, in which the inhabitants of every village are obliged to cultivate a piece of ground, and the surplus, after these are provided for, is applied to procure furniture and decorations for the church. By this benevolent plan all distress is precluded.

EVERY town has also a school for teaching reading, writing, dancing, and music; and here the inclination and genius of every one is carefully consulted, before he is forwarded in any branch of science. In one of the courts of the house belonging to the priest, are work-rooms for painters, sculptors, silver-smiths, lock-smiths, watch-makers, gilders, weavers, carpenters, and other mechanic arts, where the Indians work for the benefit of the whole town, under the inspection of the priest's coadjutors; and boys are likewise instructed in the arts and trades, for which they are best qualified. That they may never want materials, the priest takes care to have always in readiness a stock of different kinds of tools, stuffs, and other goods; so that all, who are in want, repair to him, bringing wax and other things in exchange, which are sent by the priest to the superior of the missions; and, with the produce, a fresh stock of goods is laid in. The priest also visits the plantations, in order to prevent the slothful disposition,

position, natural to the natives. He also attends slaughter-houses, where cattle are daily killed, large herds of which are kept for public use, and their flesh distributed by the priest in lots, proportioned to the number of persons in each family; and, in short, he visits the sick, to see that they want nothing necessary to their recovery.

THUS the civil government seems calculated to produce happiness; and the ecclesiastical is no less extraordinary. The priest obliges the Indians of his district punctually to attend Divine service on Sundays, and the children repair to the churches every morning, by break of day, where they take their places on opposite sides according to their sex. They there recite, alternately, the morning prayer, and christian doctrine, till sun-rise, when mass is celebrated, at which all the inhabitants are obliged to attend, without a sufficient reason for their absence. After mass all go to work, and, in the evening, the children assemble to be catechised, and the adults to pray. Marriages are, for the greater solemnity, celebrated on Sundays, when high mass is sung, and an exhortation to the married pair is pronounced from the pulpit; a list is then called over, to see who is absent; and penance is imposed on all trespasses committed in the parish.

THE parish churches in Paraguay are capacious, rich, elegant, and splendidly adorned; the eye is attracted with the gilding and painting, and the magnificence of the utensils used in religious worship, which are of gold and silver, many of them curiously embossed and set with precious stones. Very handsome galleries are erected on one side the altar for the civil magistrates, and, on the other, for the military officers, while all the vulgar are seated in great order, on seats round the

the area. Every church has it's band, composed of a considerable number of performers in vocal and instrumental music; and religious worship is celebrated in them with all the pomp observed in cathedrals. Public processions are conducted with the utmost splendor, especially that of Corpus Christi day, at which the governor, alcaides, and regidores, assist in their habits of ceremony, and the militia in their uniforms; while the rest of the people carry flambeaux: these processions are also accompanied with dancing, and the performers wear particular dresses, extremely rich, and adapted to the characters represented. In short, every thing relating to religion is contrived to strike the senses, and captivate the imagination of the weak and superstitious. The house, or rather palace of the priest, is grand, spacious, and constructed in the form of a church, in order to strike the people with religious awe and reverence: it consists of different apartments adapted to the various offices of the priest, as an ecclesiastical and civil magistrate. Every morning after prayers is devoted to hearing the complaints and redressing the grievances of those who demand an audience. At noon he hears confessions, and grants absolutions, in which he is extremely rigid and exact. In the afternoon he walks abroad, inspects public and private affairs, and superintends the labour of his parishioners; while evening is devoted to catechising and discoursing on moral and religious subjects. This regularity is said to produce an astonishing effect on the minds and morals of the Indians, who are punctual in their religious duties, faithful in their dealings, charitable to the distressed, humble, obedient, and industrious, in a much superior degree than could be reasonably expected from a people naturally indolent and slothful.

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THE missionary fathers will not allow any of the inhabitants of Peru, whether Spaniards, Mestizos, or even Indians, to come within their missions, in Paraguay. This, say their friends, is not with a view of concealing their transactions from the world, but to prevent their Indians being corrupted by the example of others. However, their vigilance and jealousy have given birth to many unfavourable reports; for, if a stranger, in spite of all their precautions, should enter the country, he is immediately secured by the superior of the parish, a house is assigned him, and every satisfaction, except his liberty, is generously allowed him. If the priest should permit him to see the town, it is always in his own company, and after notice has been given to the inhabitants to keep close in their houses; and an opportunity no sooner offers, for embarking at Buenos Ayres, than the stranger is sent thither, under a guard of Indians, who are entire strangers to every European language; whence it is impossible for them to give him any intelligence of the state of the country.

WE shall now take a view of the inhabitants of Brasil, who are composed of Portuguese, Creoles, Negroes, and Brasilians. The Portuguese, born in Europe, enjoy the places of trust and profit, and are the fewest in number: the Creoles, or those born of Portuguese parents in Brasil, are more numerous; and the Mestizos, or mixed breed, are more numerous than either, few of the Portuguese having been without black or tawny mistresses; and, their issue having intermarried, they are multiplied extremely. The Negroes are likewise very numerous, and are much more valued than the Brasilians, from their being more robust and fitter for labour; the latter, indeed, are few

in number, the Portuguese, in the invasion of the country, like the Spaniards in their conquests, destroying the unfortunate natives by every method of cruelty.

THE most judicious travellers describe the Portuguese and Creoles of Brasil, as sunk into the most effeminate luxury, and practising the most desperate crimes; and, in short, as hypocritical, dissembling, lazy, proud, and cruel. In their diet, they are, however, penurious; for, like the inhabitants of most southern climates, they are fonder of shew, state, and attendance, than of the pleasures of free society; yet their feasts, which are seldom made, are extravagantly sumptuous. This character, which is represented as particularly just, with respect to the Creoles, has been attributed to their being bred up among slaves, who perform all the business; and to their being permitted to keep a prodigious number of Negroes, not merely to work in the field, nor for domestic employments, but to attend their persons, and form their train. These they render as corrupt as themselves, by making them the instruments of their crimes, and employing them as bullies or assassins, whenever they are disposed to terrify or seek revenge. Nothing indeed can be more adapted to create the worst disorders, than the unnatural junction of slavery, idleness, and a licentious life. These Negroes are suffered to go armed, and there are vast numbers who have either merited or bought their freedom; and this is allowed in a country where the Negroes are said to be ten to one of the Portuguese and Creoles.

THE Portuguese call the Brasilians, who inhabit the north part of the country Tapuyers, and those who dwell in the south Tupinambes; but divide them into several petty nations, differing in

in language, though very little in their manners and customs. The Tapuyers are of a good stature, and of a dark copper colour, with black hair hanging over their shoulders; but they have none on their bodies or faces, and go almost naked, the women only wearing a slight covering of leaves round their waist. They are, however, adorned with glittering stones hung upon their lips or nostrils, bracelets of feathers about their arms, and a circlet of feathers upon their heads. Some paint their bodies of all colours, while others, rubbing themselves over with gum, stick beautiful feathers upon them, which makes them appear at a distance more like fowls than human creatures. The Tupinambes who inhabit the south of Brasil are of a moderate stature, and a fairer complexion than their northern neighbours who lie nearer the line; but neither of them are so black as the Africans in the same latitude; for there were no Negroes in America before they were transported thither by the Portuguese and Spaniards. These people have, however, flat noses, which are not natural, but made so in their infancy, a flat nose being there esteemed a beauty; they have also black curled hair on their heads, and paint themselves like the northern Brasilians.

THEY have been represented by many writers as Cannibals, and all the Brasilians have been charged with eating human flesh; but this appears to have been a slander cast upon them, to give a colour to the cruel treatment they have met with from their conquerors; nor will the Portuguese allow that they had any kind of religion, and yet confess that they had priests, and admitted of a state of rewards and punishments, according to their valour or cowardice. Their prevailing religious notions are, that there are certain invisible

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beings,

beings, the dispensers of good and evil, the rewarders of virtue, and the punishers of vice ; and that, after death, the good shall visit their ancestors who dwell in a delightful place beyond the Andes. They have always been remarkable for their hospitality and civility to strangers : those who live near the Portuguese are a tractable and ingenious people, ready to learn any art or science the Portuguese will teach them ; and take nothing so kindly of the priests as their instructing their children, which has given them an opportunity of making many converts ; and, in short, those who live under the Portuguese generally conform to their customs in eating, drinking, and cloathing.

BEFORE we leave the inhabitants of South America, it will be proper to observe that, from the late voyage made by commodore Byron round the world, there is undoubted testimony of there being a people on the most southern extremity of America of a most extraordinary size. The commodore, with a number of his men, landed, and, after many amicable signs, presented these people with a number of trinkets, as strings of beads, ribbons, and the like. The commodore, to facilitate the distribution of them, made these Indians sit down on the ground, that he might put the strings of beads, &c. round their necks ; and such was their extraordinary size, that in this situation they were almost as high as the commodore. Their middle stature seemed to be about eight feet, their extreme nine and upwards. Their cloathing consisted of the skins of Peruvian sheep, which reached from their shoulders down to their knees ; and their hair was black, long, and flowing down behind. The stature of the women was equally surprising with that of the men, and their faces painted in a most extravagant manner. Some
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of the women had collars on their necks, and bracelets on their arms; and the infants, who were carried by their mothers, had a largeness and strength of features, which, considering their age, seemed to bear some proportion to those of their parents. The people, thus gigantic in their size, appeared extremely humane and friendly. They had all the symptoms of a gentle and benevolent disposition, and were so delighted with the different trinkets which they had an opportunity of viewing, as they hung on their necks and fell down on their bosoms, that the commodore could scarcely restrain them from caressing him. They made signs to the commodore, and that part of the ship's crew which landed, to go with them towards some smoke which appeared at a distance, pointing to their mouths, as if they intended to give them some refreshment; but it was thought improper to comply with this friendly invitation; and, when the English left them, they appeared distressed and afflicted. These people have been mentioned by several authors, but there wanted sufficient evidence of the truth of their real existence, till the publication of a voyage round the world, under commodore Byron, which bears indubitable marks of authenticity.

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